

EXHIBIT A

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TENNESSEE
KNOXVILLE DIVISION**

LEWIS COSBY, KENNETH R. MARTIN,)	
as beneficiary of the Kenneth Ray Martin)	
Roth IRA, and MARTIN WEAKLEY on)	
behalf of themselves and all others)	
similarly situated,)	
)	
Plaintiffs,)	
)	
v.)	No.: 3:16-CV-121-TAV-DCP
)	
KPMG, LLP,)	
)	
Defendant.)	

EXPERT REBUTTAL REPORT OF CHAD COFFMAN, CFA

June 14, 2019

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I. INTRODUCTION

1. On March 15, 2019 and April 19, 2019¹, I submitted expert reports in this matter in which I opined: (1) that the markets for Miller Energy Securities² were efficient during the Analysis Period³; and (2) that damages in this case could be calculated for both the Section 10(b) Class and the Section 11 Class pursuant to class-wide approaches consistent with Lead Plaintiffs' claims.⁴

2. Despite Defendant's attempt to characterize my methodology as unreliable and containing many errors, the reality is that, out of many thousands of calculations and assessments, I made two errors in my Initial Report that impacted my calculations. Neither was an error in the general methodology I employed to analyze market efficiency.⁵ Instead, one error involved assigning an incorrect market date to a single Miller Energy earnings announcement, and the other was the inadvertent exclusion of two sources cited in the Complaint when assessing which days during the Analysis Period contained news. I readily admitted to the inadvertent errors, corrected them in a new report, and empirically demonstrated that my ultimate

¹ On March 15, 2019, I submitted an expert report in this matter (my "Initial Report"). On April 19, 2019, I submitted a corrected report (the "Coffman Report" or my "Report"), which replaced my Initial Report.

² As in my Report, the term Miller Energy Securities refers to Miller Energy common stock ("Miller Energy Common Stock" or "Common Stock") and Miller Energy's two preferred securities ("Miller Energy Preferred Securities" or "Preferred Securities"): Miller Energy 10.75% Series C Cumulative Redeemable Preferred Stock ("Miller Energy Series C Preferred Stock" or "Series C Preferred Stock"), and Miller Energy 10.5% Series D Fixed Rate/Floating Rate Cumulative Redeemable Preferred Stock ("Miller Energy Series D Preferred Stock" or "Series D Preferred Stock").

³ The stated Class Period in the Second Amended Class Action Complaint is August 29, 2011 – October 1, 2015, however, in my Report, I opined on market efficiency from the beginning of the Class Period through July 30, 2015 (*i.e.* the market date before Miller Energy Securities were delisted from the New York Stock Exchange). This timeframe is the Analysis Period.

⁴ Unless otherwise defined herein, all capitalized terms shall have the meanings given to them in the Report.

⁵ This methodology has led to successful class certification in dozens of securities litigation matters. For example, *Dr. Joseph Kasper v AAC Holdings et al*, No. 15-cv-00923-JPM-jsf (M.D.Tenn.); *Hatamian v. Advanced Micro Devices, Inc.*, No. 4:14-cv-00226 (N.D. Cal.); *Laborers Pension Trust Fund – Detroit, vs. Conn's, Inc.*, 4:14-cv-00548 (S.D. Tex.); and *Leon D. Milbeck v. TrueCar Inc*, No. 2:18-cv-02612 (C.D. Cal.), to name but a few.

conclusions and opinions were unaffected by the errors. My overall methodology was unaltered. While I strive for perfection, that does not always occur.⁶

3. Following the submission of my Report, counsel for Lead Plaintiffs provided me with a copy of the May 13, 2019 Expert Report of Dr. Mukarram Attari, Ph.D. (the “Attari Report”) prepared in connection with Defendant’s Opposition to Plaintiffs’ Motion for Class Certification, and the sworn deposition transcript of Dr. Attari taken on June 4, 2019 (“Attari Deposition”), and asked me to review and respond to the Attari Report and Attari Deposition. In summary, nothing contained in the Attari Report or Attari Deposition changes the opinions I have offered in this matter. The remainder of this Rebuttal Report provides my response to the Attari Report and Attari Deposition.

4. In formulating my opinions set forth in this Rebuttal Report, I relied upon my Report and my knowledge, experience, and formal training in economics, finance, and statistics, as well as the allegations and facts set forth in this lawsuit. In performing the analyses set forth in this Rebuttal Report, I also considered: (1) the Attari Report; (2) data, analyses, and back-up materials provided by Dr. Attari to counsel for Lead Plaintiffs that Dr. Attari claims to have considered in connection with his analyses; (3) the Attari Deposition; and (4) other relevant materials and information. All of the materials that I relied upon and considered in reaching my opinions in this Rebuttal Report are identified in the attached **Appendix A**, as well as in the Appendices to my Report.

5. Global Economics Group is being compensated at an hourly rate of \$800 per hour for my work on this matter, and at rates between \$170 and \$450 per hour for members of my

⁶ The correction of these two errors impacted a number of subsequent calculations in my Report. The changing of these numbers does not reflect independent errors. Based upon my review, I also made certain non-substantive corrections that did not influence any calculations or outcomes in any way.

staff who performed work in connection with this Rebuttal Report under my direction and supervision. My compensation is in no way contingent on the outcome of this case or the opinions offered.

6. I reserve the right to amend this Rebuttal Report, including to reflect new information that becomes available to me in light of the discovery process or future rulings from the Court.

II. DR. ATTARI DOES NOT DISPUTE THAT THE MARKET FOR MILLER ENERGY COMMON STOCK WAS EFFICIENT

A. DR. ATTARI DOES NOT DISPUTE THAT MY ANALYSIS OF THE CAMMER AND KROGMAN FACTORS DEMONSTRATES THAT THE MARKET FOR MILLER ENERGY COMMON STOCK WAS EFFICIENT

7. Dr. Attari provides no evidence or opinions to contradict my opinion of market efficiency for Miller Energy Common Stock. Indeed, he either readily concedes, or does not dispute, my findings for the *Cammer* and *Krogman* factors as they relate to Miller Energy Common Stock:

- a. Dr. Attari affirmatively concurs that the average weekly trading volume for Miller Energy Common Stock surpassed the threshold level necessary for an efficient market (Cammer Factor 1).⁷
- b. Dr. Attari agrees that a number of analysts covered Miller Energy Common Stock throughout the Analysis Period (Cammer Factor 2).⁸

⁷ Attari Deposition 24:4-8.

⁸ Attari Report ¶171 and Attari Deposition 25:5-7. “Mr. Coffman has said there were – whatever – 10 or 15 analysts covering it...And I’m not disputing it in this report, yes.” Attari Deposition 26:2-7.

- c. Dr. Attari does not dispute my conclusion that Miller Energy Common Stock met the market maker factor (Cammer Factor 3).⁹
 - d. Dr. Attari does not dispute that Miller Energy Common Stock traded on the NYSE throughout the Analysis Period¹⁰ and that the NYSE has rules that virtually guarantee a liquid market.¹¹
 - e. Dr. Attari does not dispute that Miller Energy was able to file a Form S-3 throughout the majority of the Analysis Period (Cammer Factor 4).¹²
- Additionally, Dr. Attari incorrectly states that when a company falls below a market capitalization of \$75 million, it is ineligible to file a Form S-3.¹³ In fact, the SEC does allow companies that have previously filed a Form S-3, but have since fallen below \$75 million in market value, to remain Form S-3 eligible provided that they follow certain guidelines.¹⁴ Despite Dr. Attari's flawed criticism, he acknowledges that Miller Energy was S-3 eligible for the majority of the Analysis Period¹⁵ and offers no economic logic for why short-term S-3 ineligibility would impede the market from remaining efficient.

⁹ Attari Deposition 60:19-23. ("Q: In your report, you don't dispute that the number of market makers of Miller Energy's common stock meets the standard under Cammer; correct? A: I don't dispute that, yes.")

¹⁰ Attari Deposition 114:20 – 115:2.

¹¹ Attari Deposition 115:22 – 116:3 ("Q: In the EGC case we were discussing earlier, you claimed that the courts recognize that securities that trade or [are] listed on the New York Stock Exchange are likely to be efficient, didn't you? A. Likely to be, yes.")

¹² Attari Deposition 66:1-8, 12-14.

¹³ Attari Report ¶¶191-192.

¹⁴ <https://www.sec.gov/divisions/corpfin/guidance/safinterp.htm> (accessed June 10, 2019) ("An issuer with less than \$75 million in public float is eligible to use Form S-3 for a primary offering in reliance on Instruction I.B.6, which permits it to sell no more than one-third of its public float within a 12-month period.")

¹⁵ Attari Deposition 66:1-8, 12-14.

f. Dr. Attari does not dispute that there is a cause and effect relationship between new news and changes in the market price for Miller Energy Common Stock (Cammer Factor 5). More specifically, while Dr. Attari makes a general (and incorrect) criticism of the threshold I use to evaluate cause and effect (which I have used in dozens of other certified class actions), Dr. Attari does not dispute the results of my statistical tests demonstrating that:

- Miller Energy Common Stock is statistically significantly more likely (with over 95% confidence) to experience a statistically significant price movement on earnings announcement dates than “no news” dates.¹⁶
- Miller Energy Common Stock experienced statistically significantly (with over 95% confidence) greater volume on earnings announcement dates than “no news” dates. I have shown that the market price of Miller Energy Common Stock is more

¹⁶ See Coffman Report ¶¶74-75. Defendant makes note of the fact that I found that less than 50% of the earnings announcements had a statistically significant price movement, but this is an irrelevant threshold (KPMG LLP’S Memorandum of Law in Support of its Motion to Exclude the Reports and Testimony of Chad Coffman, filed May 21, 2019 No. 3:16-cv-00121-TAV-DCP (E.D. Tenn)). Indeed, there are numerous reasons why many earnings announcements may not be statistically significant that are entirely consistent with market efficiency. For example, as mentioned in my Report and as Dr. Attari testified, the information released may have been largely consistent with expectations, there may have been a mix of positive and negative information, or the market may be focused largely on other factors (Coffman Report ¶¶74-75, Attari Deposition 130:8-132:3). The financial economics literature is clear that there is no theoretical or mathematical reason to believe that the fraction of news days associated with statistically significant returns should exceed fifty percent in an efficient market (See Tabak, David. “What We Should Expect When Testing for Price Response to News in Securities Litigation,” *NERA Economic Consulting*, 2016 pp. 1-17.). Dr. Attari further acknowledges that he does not know of, and has not calculated, an appropriate threshold and admits that should a threshold be calculated, it may even be less than fifty percent (Attari Deposition 123:1-128:12.) The fact that less than fifty percent of earnings announcements were associated with statistically significant price movements for Miller Energy Common Stock does not impact my finding that there was a cause and effect relationship between new news and Miller Energy Common Stock.

likely to experience statistically significant price movements, have price movements that are larger, and experience greater volume on earnings announcement dates than “no news” dates. Beyond these scientific tests, Dr. Attari does not even address other clear and convincing examples from my Report that further demonstrate a clear cause and effect relationship.¹⁷ Put simply, Dr. Attari does not opine there is a lack of cause and effect relationship between new information and the market price of Miller Energy Common Stock, and he does not dispute the results of the statistical tests I conducted.

- g. Dr. Attari does not dispute that 181 institutions reported owning Miller Energy Common Stock during the Analysis Period and that this substantial level of institutional ownership supports a conclusion of market efficiency (Krogman Factor).¹⁸
- h. Dr. Attari mischaracterizes my report when he claims that I do not consider the public float of Miller Energy Common Stock in my analysis of market efficiency (Krogman Factor).¹⁹ **Exhibit 16** of my Report analyzes the shares outstanding, insider and institutional holdings, and public float of Miller Energy Common Stock. Throughout the Analysis Period, insiders held, on average, 21.3% of all shares outstanding of Miller Energy Common Stock, meaning that 78.7% of shares were held by non-

¹⁷ See Coffman Report ¶¶vi -xiii.

¹⁸ Attari Deposition 82:5-12.

¹⁹ Attari Report ¶124.

insiders. This large percentage of shares held by non-insiders supports a finding of market efficiency, and Dr. Attari does not dispute this further.

- i. Dr. Attari does not dispute that the bid-ask spread for Miller Energy Common Stock was reasonably low (Krogman Factor).²⁰ He does not dispute that the average percentage bid-ask spread for Miller Energy Common Stock in each month was between 0.1535% and 1.7477%. He does not dispute that prior to the market prices of Miller Energy Securities substantially falling, the bid-ask spread for Miller Energy Common Stock was below the average bid-ask spread of a random sample of 100 other common stocks trading on the NYSE and NASDAQ in December 2014, as illustrated in my Report. Dr. Attari does not dispute that this factor provides evidence that Miller Energy Common Stock traded in an efficient market throughout the Analysis Period.

8. Finally, while neither a *Cammer* Factor nor a *Krogman* Factor, Dr. Attari does not dispute that there was option trading in Miller Energy Common Stock during the Analysis Period.²¹ Additionally, he does not dispute that the existence of active option trading in Miller Energy Common Stock provides evidence supporting efficiency.

9. In sum, Dr. Attari either concedes or does not dispute the evidence provided in my Report that the *Cammer* and *Krogman* factors set out by the courts are satisfied for Miller Energy Common Stock.

²⁰ Attari Deposition 78:8-17.

²¹ Attari Deposition 96:6-10.

B. MY CALCULATION OF THE MILLER COMMON STOCK ABNORMAL RETURN ON OCTOBER 24, 2011 WAS PROPER

10. Although he does not dispute that the market for Miller Energy Common Stock was efficient, Dr. Attari criticizes the method by which I calculated an abnormal return on a single day for Miller Energy Common Stock.²² My treatment of this day is a matter of valid, statistical judgment. When confronted with missing values for a control index, there are several different options for handling the issue. For the next day in which the value for the control index appears, one could throw out the return for that day (and lose part of the sample) or use the multiple-day return for the control index, but understand it may introduce some level of potential measurement error into the model.²³ In this particular case, my judgment was that including a multiple day return in the Oil Price Index did not introduce substantial measurement error. This judgment is borne out by the fact that my results are robust to either treatment. Furthermore, the missing index data issue is not present at all if the NYMEX WTI Oil Index is used and, as reflected in **Rebuttal Exhibit 1**, the conclusions from my cause and effect analysis are unaltered.²⁴

²² Attari Report §IV.C.4.

²³ In this context “measurement error” is a statistical concept that is distinct from a computational error. All models have some level of measurement error because they are models that rely on underlying statistical assumptions. See Greene, William, *Econometric Analysis*, MacMillan, 1990, p. 293. (“Thus far, it has been assumed (at least implicitly) that the data used to estimate the parameters of our models are true measurements on their theoretical counterparts. In practice, this happens only in the best of circumstances. All sorts of measurement problems creep into the data that must be used in our analyses.”)

²⁴ Dr. Attari correctly notes that the two days with missing abnormal returns were incorrectly treated as no news days with statistically significant abnormal returns. Again, using the NYMEX index eliminates this issue and even if I simply correct the original treatment it strengthens the evidence of a cause and effect relationship.

III. I DEMONSTRATED THAT THE MARKETS FOR MILLER ENERGY SERIES C AND SERIES D PREFERRED SHARES WERE EFFICIENT AND DR. ATTARI'S CRITICISMS ARE EITHER MISPLACED, MISLEADING, OR INCORRECT

A. MILLER PREFERRED SECURITIES WOULD NOT BE EXPECTED TO REACT TO EARNINGS ANNOUNCEMENTS PRIOR TO CONCERNS ABOUT SOLVENCY

11. In my Report, I explained using economic logic why one would not expect to see the market price of Miller Energy Series C and Series D Preferred Stock react to earnings announcements.²⁵ As explained in my Report, as a general matter, one would not expect Miller Energy Preferred Securities to react to changes in earnings that did not cause the market to question the solvency of the firm. Dr. Attari never addresses this logic from my Report and simply suggests, without economic support, that in an efficient market one would expect preferred stock to react to earnings announcements.²⁶ This is demonstrably false and inconsistent with economic theory.

12. As I explained in my Report, for non-convertible debt-like securities (which applies to Series D) or for convertible debt-like securities where the common stock price is below where conversion to common would be profitable (which applies to Series C), investors in preferred shares would (unlike common shareholders) not receive any higher expected cash flows from a positive earnings surprise. This flows directly from the basic valuation principle that all securities are valued based upon the expected future cash flows *to those security-holders*, discounted at the appropriate rate.²⁷ As described in the Coffman Report, Miller Energy

²⁵ Coffman Report ¶51.

²⁶ Attari Report ¶¶134-135, 141.

²⁷ Reilly, Frank K. and Keith C. Brown, Investment Analysis and Portfolio Management, The Dryden Press, Sixth Edition, 2000, p. 82; Brealey, Richard A. and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill, 1988, Third Edition, pp. 308-309.

Preferred Securities are entitled to the payment of preferred dividends and eventually the redemption value.²⁸ Only common stockholders are entitled to residual earnings over and above what is necessary to service debt and preferred securities. As a result, all else being equal, an additional dollar of earnings at the margin would have no influence on the market value of preferred securities. Likewise, a negative earnings surprise, as long as it was not sufficiently large to call into question the payment of preferred dividends, would not lower the expected cash flows to preferred shareholders.²⁹ Dr. Attari does not, and cannot, refute this most straightforward application of basic valuation concepts to the Miller Energy Preferred Securities.

13. However, this economic logic changes once the market begins to question whether there will be enough resources to continue paying preferred dividends. A clear signal of this market concern occurs when preferred shares start trading substantially below their redemption value, because it reflects the market's belief that the cash available to satisfy preferred dividends and redemption of the preferred shares is more uncertain.³⁰ In those circumstances, the availability of cash flows to pay preferred dividends is more closely tied to the short-term financial prospects of the firm. As such, one would expect greater sensitivity to earnings announcements. This is precisely the logic and rationale for (1) considering different events before and after the preferred securities started trading below their redemption value and (2) why

²⁸ Miller Energy Series C Preferred Stock may have also become sensitive to earnings announcements had the Common Stock approached or exceeded \$10 per share because of the conversion features outlined in its prospectus. However, Miller Energy Common Stock did not reach that value during the Analysis Period. Series D Preferred Stock, meanwhile, was non-convertible and was therefore not sensitive to any conversion feature. For further information on the terms and conditions of Miller Energy Series C and Series D Preferred Stock, please see Appendix C from my Report.

²⁹ Attari Deposition 132:17-21 ("So preferred stockholders get paid after debt holders have been paid but before common stockholders are paid. They typically have a stated dividend.")

³⁰ Emanuel, David. "A Theoretical Model for Valuing Preferred Stock." *The Journal of Finance*, vol. 38, no. 4, 1983. See also "How to Play Preferreds", *MoneyShow*, 2017. ("If [a preferred share is] trading significantly below par, investors may have concerns about the company's creditworthiness.").

I did not consider earnings announcements prior to October 15, 2014 as a meaningful or statistically powerful set of dates to consider.³¹ Therefore, Dr. Attari's analysis of the earnings announcements and whether they did not cause a statistically significant price movement for the preferred shares is neither surprising nor informative as to whether there was a cause and effect relationship for Miller Energy Preferred Securities. Moreover, Dr. Attari admits that "the information relevant to investors in Miller Energy's common stock and the preferred stock was different" and that investors in the Preferred Securities need information besides earnings announcements to evaluate the debt component of the preferred securities.³²

B. DR. ATTARI MISCHARACTERIZES MY REFERENCES TO THE APPLICABLE DISCOUNT RATE AND THE TIME VALUE OF MONEY

14. Dr. Attari also misleadingly asserts that my Report suggested that the market price of Miller Energy Preferred Securities should only be impacted by risk-free interest rates prior to October 15, 2014.³³ My report makes no such suggestion. As quoted by Dr. Attari, I state, "from the time of the issuance of each of the Preferred Securities to the time where the market prices substantially fall below the par value (and therefore indicating an increased risk of default), market price would be driven primarily by changes in the time value of money (*i.e.* **the applicable discount rate**)."³⁴ Basic valuation theory explains that the "applicable discount rate" for a security incorporates both risk free rates and the relevant security-specific risk premium.³⁵ Any suggestion that I was referring only to risk free rates is misleading and incorrect (indeed I

³¹ By statistically powerful, I mean that it would have little ability to distinguish between a market where there was a cause and effect relationship and one that did not.

³² Attari Report ¶173.

³³ Attari Report ¶139.

³⁴ Attari Report ¶136. Emphasis added.

³⁵ Brealey et al. Principles of Corporate Finance, Tenth Edition, McGraw-Hill, 2010, Chapter 3.

never even mention the term “risk-free rate”). As a result, the analysis performed by Dr. Attari to show that returns of Miller Energy Preferred Securities were not correlated with risk free rates proves nothing, and is not at all inconsistent with any statement in my Report.³⁶ I never suggested risk-free rates alone could or would explain the returns of the Preferred Securities.³⁷

C. DR. ATTARI’S CLAIM THAT I ENGAGED IN DATA SNOOPING IS UNSUPPORTED AND FALSE

15. Dr. Attari also falsely asserts without any evidence that I may have engaged in data snooping to determine which events to test.³⁸ My Report clearly identified the objective criteria I used to determine the news dates I tested for Miller Energy Preferred Securities. Moreover, the selection criteria flow naturally from my discussion of how preferred stocks differ from common stocks and what types of news would be expected to impact preferred shares – a fact that Dr. Attari conceded at his deposition.³⁹ Again – my criteria was: “firm-specific events that clearly updated the market regarding the ability of the Company to continue paying dividends or for the securities to continue trading on the exchange.”⁴⁰ Dr. Attari provides no authority or economic rationale to reject considering events related to dividend policy as an objective set of dates to test. Dr. Attari does not dispute that information about delisting would be relevant to a valuation of Miller Energy Preferred Securities. Dr. Attari’s suggestion that the delisting itself did not

³⁶ Attari Report ¶¶138-139.

³⁷ To the extent Dr. Attari is interpreting my use of the phrase “time value of money” to specifically mean a “risk-free rate”, he is simply wrong. The discount rate (which I clearly reference in my Report as a synonym for what I meant by time value of money) is the rate at which an investor in the Preferred Securities is willing to trade money today for money tomorrow within the context of an investment in the Preferred Securities. That is the relevant “time value of money” or “yield” necessary to compensate the investor for use of their capital. See Brigham, Eugene F. and Joel F. Houston. Fundamentals of Financial Management, Eighth Edition, The Dryden Press, 1998, Chapter 6.

³⁸ Attari Report ¶132.

³⁹ Attari Deposition 135:5-18.

⁴⁰ Coffman Report ¶52.

provide unexpected news is simply wrong and inconsistent with the facts.⁴¹ There are many cases in which a notice of potential delisting does not lead to an actual delisting.⁴²

D. DR. ATTARI'S SUGGESTION THAT THERE IS NO SUPPORT FOR THE TESTS I PERFORM IN EXHIBIT 10 AND 12 OF MY REPORT IS SELF-CONTRADICTIONARY, IGNORES THE MOST BASIC PRINCIPLES OF HYPOTHESIS TESTING, AND IS INCONSISTENT WITH CASE LAW

i. DR. ATTARI CONTRADICTS HIMSELF WHEN HE FALSELY CLAIMS THERE IS NO LITERATURE TO SUPPORT MY TESTS

16. Dr. Attari acknowledges that there is literature specific to class action securities cases published by a firm typically associated with defense experts describing the methodology I employed to test for cause and effect and finding that it is both valid and superior to methods that historically were used to establish market efficiency in this context.⁴³ He also acknowledges that the methodology I employed has been evaluated and accepted by numerous courts over many years.⁴⁴ The literature that Dr. Attari cites claims that “what is needed, therefore, is a test that examines the response of the stock price to news.... In the case of testing whether there is a cause and effect relationship between news and movements in a stock price, this means not simply finding a case where there was news and a stock price movement, but finding two

⁴¹ See Section V below.

⁴² Sanger, Gary C. and James D. Paterson, “An Empirical Analysis of Common Stock Delistings,” *The Journal of Financial and Quantitative Analysis*, Vol. 25 (2), 1990 pp. 262-272. (“The period 1962-1985, a total of 363 NYSE and ASE firms fell below their respective aggregate market value requirements. Of these, 225 were delisted.” p. 263 fn.1) For more recent evidence of stocks regaining compliance with the NYSE and NASDAQ following a delisting notification see “ReWalk Robotics Regains Compliance with Nasdaq Listing Rules 5550(a) and 5550(b),” *Globe Newswire*, April 26, 2019; “Camber Energy, Inc. Announces That It Has Regained Compliance with All NYSE American Continued Listing Standards,” *Accesswire*, June 5, 2019; and “Novan Achieves Compliance with Nasdaq Listing Rule 5450(b)(2)(A),” *Globe Newswire* June 6, 2019.

⁴³ Due to its specific and limited applications outside its scope, it is unsurprising that the specific methods used to establish market efficiency in the niche area of class action securities cases has not been the subject of peer reviewed economic literature.

⁴⁴ Attari Deposition 121:5 - 122:6.

samples of defendant's stock prices-one with news and one without-and testing whether the price movements for the two samples are distinguishable."⁴⁵ This is precisely the methodology I utilize in my Report.

17. Dr. Attari's criticism of my methodology also ignores that the test I perform is a standard hypothesis test that is ubiquitous in applications of the scientific method, and is entirely consistent with the literature he cites. For example, my approach is akin to the tests used to evaluate drug products. The news dates represent the "treatment" group and the no news dates represent the "placebo" group. My tests show that there are statistically significant differences in outcomes between the two groups. This is quintessential hypothesis testing that is described in basic statistical textbooks.⁴⁶

18. In addition, Dr. Attari's criticism ignores that the methodology I employed is endorsed in the academic literature that he himself cited. For Dr. Attari to suggest there is "no support" for my methodology is disingenuous and misleading. Further, his suggestion that I am using a "low threshold" is directly contradicted by the fact that I am requiring the news dates to be statistically significantly different than the no news dates at the standard level used for hypothesis testing – namely, that I can reject with 95% confidence that the price movements on the news dates are the same as the price movements on the no-news dates. This test is

⁴⁵ Ferrillo, Paul A., Frederick C. Dunbar, PhD, and David Tabak, PhD, "The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof From Plaintiffs In Fraud-On-The-Market Cases," *St. John's Law Review*, Vol. 28(1), 2004. See also David Tabak, "Use and Misuses of Event Studies to Examine Market Efficiency," *NERA Economic Consulting*, September 11, 2009.

⁴⁶ Tabak, David I. and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, Wiley, 2001; MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economics Literature* 35(1) (1997), pp. 13-39 (The null hypothesis is "...that the event has no impact on the behavior of returns (mean or variance)", p. 21); Binder, John, "The Event Study Methodology Since 1969," *Review of Quantitative Finance and Accounting* 11 (1998), pp. 111-137; Aharony, Joseph and Itzhak Swary, "Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis," *The Journal of Finance* 35(1) (1980), pp. 1-12.

completely in line with the literature that Dr. Attari cites, which tests for stock price movements at both the 90 percent and 95 percent confidence level. Again, Dr. Attari provides no authority or support to suggest that using the typical threshold for inference testing in scientific inquiry generally, and in the financial economics discipline specifically, is a “low threshold.”

19. Dr. Attari suggests more specifically that my comparison of absolute abnormal returns and trading volume do not take into account that some of the no-news dates are drawn from the period of time when volatility and volume were lower and, therefore, potentially bias my test for those measures.⁴⁷ While he suggests this renders the tests “invalid”, he is wrong.⁴⁸ All statistical tests have potential sources of bias. The question is whether the bias is sufficiently large to render the test unreliable. **Rebuttal Exhibits 2 and 3** show that even if I perform the same comparison over the post-October 15, 2014 period so that all the data are coming from the higher volatility and volume period, the differences between the news and no news days are still significant at well over the 99% confidence level. Thus, while Dr. Attari identifies a minor potential source of statistical bias, I controlled for that bias and it does not alter the outcome of the test or impact the results.

**ii. DR. ATTARI MISCHARACTERIZES THE “MISGIVINGS”
FELT BY THE AUTHORS OF THE LITERATURE HE CITES**

20. Dr. Attari relatedly suggests that the authors of the methodology I employed express “strong misgivings” about that methodology. Dr. Attari is wrong. One of the authors of the methodology, Dr. Tabak, recently published literature supporting the appropriateness of the

⁴⁷ Attari Report ¶¶142-144.

⁴⁸ Attari Report ¶159.

“FDT methodology” I used, and discusses case law where the methodology has been applied and upheld.⁴⁹ In fact, Dr. Tabak acknowledges that the methodology I employ is similar to those conducted in medical studies, in that the price movements on news days (the treatment) group are compared to price movements on no news days (the placebo group). He expresses no misgivings about the validity of this methodology, which has been employed in countless securities cases throughout the years.

21. Further, while Dr. Tabak correctly explains that event studies can be improperly performed to determine market efficiency, my method is not subject to these criticisms. I do not perform a non-rigorous “proof by example”, as some experts have, where the “proof” of market efficiency is a list of dates that happen to contain news and a statistically significant price reaction.

22. Although Dr. Attari accuses me of potentially “data snooping” in my selection of news days, I did no such thing and my method is in line with the literature he cites (“Fortunately, the relevant academic literature is clear: first one identifies news and then measures price movements associated with that news”).⁵⁰ Dr. Attari’s literature suggests performing an FDT test (i.e. the test I perform), “in which news days and non-news days are categorized into those that are associated with statistically significant returns and those with statistically insignificant

⁴⁹ Tabak, David, “What Should We Expect When Testing for Price Response to News in Securities Litigation,” *NERA Economic Consulting*, 2016, pp 1-17 “More recently, courts have accepted a number of tests of market efficiency that directly follow the FDT Test procedures, if not citing the FDT paper directly.”

⁵⁰ Tabak, David I. and Frederick C. Dunbar, “Materiality and Magnitude: Event Studies in the Courtroom,” in *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, Wiley, 2001.

returns.”⁵¹ Therefore Dr. Attari’s claim that my cause and effect analysis has “no scientific basis” is unsupported by the very literature he cites.

**iii. MY METHODOLOGY HAS BEEN REPEATEDLY ACCEPTED
BY COURTS THROUGHOUT THE COUNTRY AND IN THE
6TH CIRCUIT**

23. Dr. Attari’s criticism of the methodology I employed ignores the substantial and growing volume of case law that supports its’ use.⁵² I, like numerous other experts, have used the same overall approach to evaluate cause and effect in at least 25 prior reports where the class has been certified.⁵³ Indeed, in many of those cases, my approach even goes unchallenged by defendants.

**E. DR. ATTARI’S SUGGESTION THAT MY ANALYSIS OF
AUTOCORRELATION IS “RIDDLED WITH ERRORS” IS UNSUPPORTED
BY THE TEXT OF HIS OWN REPORT**

24. Dr. Attari does not identify any “errors” in my autocorrelation analysis (see Attari Report ¶¶ 161-166, which does not identify any “errors”).⁵⁴ Instead, his criticism centers around the fact that (1) I ran only one type of test for autocorrelation; (2) that a lack of autocorrelation alone is not evidence of semi-strong form efficiency; and (3) that my test shows some autocorrelation.

⁵¹ Tabak, David I. and Frederick C. Dunbar, “Materiality and Magnitude: Event Studies in the Courtroom,” in Litigation Services Handbook, The Role of the Financial Expert, Third Edition, Wiley, 2001.

⁵² Tabak, David I, “What Should We Expect When Testing for Price Response to News in Securities Litigation”, NERA Economic Consulting, 2016.

⁵³ For example, *Dr. Joseph Kasper v AAC Holdings et al*, No. 15-cv-00923-JPM-jsf (M.D. Tenn.)

⁵⁴ To the extent he is referring to the purported “errors” referenced in Section IV of his report, I address these below in this Section, as well as Sections F and G.

25. First, while a simple test, the test I perform is a standard method to assess autocorrelation.⁵⁵ In fact, Dr. Attari has testified previously that my method is the “most common” test for autocorrelation.⁵⁶ It is especially relevant to the context of market efficiency, because it is the one factor that tests for whether there is a systematic bias in the movement of returns. For example, if a stock regularly responded only partially to news, it would yield consistent positive autocorrelation under my test. Likewise, if the market consistently over-reacted, that would induce systematic negative autocorrelation. While Dr. Attari speculates that there could be more complex ways in which the stock is autocorrelated, he does not provide any such evidence.⁵⁷ In other words, if yesterday’s stock price movement is not a consistent predictor of today’s price movement, there is no *a priori* reason to believe that there is a relationship with multiple prior days.

26. Second, I never claim in my report that the autocorrelation analysis proves market efficiency. Indeed I was very clear when I stated “... since there are no bright-line tests for efficiency, it is important to consider the identified efficiency factors as a whole because none of the individual tests or metrics is determinative as to whether a particular market is efficient.”⁵⁸ However, autocorrelation is one of the many factors I analyzed and the results are consistent with, and therefore supportive of, market efficiency.

⁵⁵ Gujarati, D., Basic Econometrics, Third Edition, McGraw Hill, 1995, Chapter 12.

⁵⁶ Expert Report of Dr. Mukarram Attari, in Dalton Petrie, et al, v Electronic Game Card, Inc., et al, and Penny Pace, et al, v. Timothy Quintanilla, et al, No. 10-0252 and 14-2067, filed June 1, 2015 (C.D. California). ¶28. (“The most common test for autocorrelation is the one that tests if a return on a given day is predicable by the prior day’s return.”)

⁵⁷ Attari Deposition 92:15-21. (“Q: Can you explain what kind of complex arbitrage opportunity would be able to take place where the auto correlation coefficient reverses regularly like that. A. Sitting here, I haven’t done the work for it.”)

⁵⁸ Coffman Report ¶22.

27. Finally, Dr. Attari suggests that my autocorrelation test suggests that the market for the Miller Energy Preferred Securities was inefficient.⁵⁹ Nothing could be further from the truth. As described in my Report, autocorrelation can appear in security returns due to the timing of news or random chance, but the relevant test is whether there is evidence of systematic autocorrelation that would suggest an arbitrage opportunity. To have an arbitrage opportunity one would expect the autocorrelation to have a consistent sign (*i.e.* it would have to either be positively autocorrelated so one could employ a strategy of buying when the price is up or negatively autocorrelated so that one could employ a strategy of buying when the price is down).⁶⁰ As shown in ***Exhibit 17-C*** and ***Exhibit 17-D*** of my Report, and as Dr. Attari acknowledged⁶¹, the sign of the autocorrelation coefficient flips signs regularly, demonstrating there was no consistent arbitrage opportunity.

F. DR. ATTARI'S SUGGESTION THAT OTHER FACTORS DO NOT SUPPORT A FINDING OF EFFICIENCY FOR SERIES C AND SERIES D IS INCORRECT

28. Dr. Attari acknowledges the high average trading volume of Miller Energy Preferred Securities.⁶² Indeed, the average weekly trading volume for both Miller Energy Preferred Securities exceeded the threshold level of average weekly trading volume necessary for an efficient market as cited by the *Cammer* Court. To reiterate, and as shown by ***Exhibit 3-C*** and ***Exhibit 3-D*** of my Report, the average weekly turnover as a percentage of shares outstanding was 5.16% for Series C Preferred Stock and 7.93% for Series D Preferred Stock. These levels of

⁵⁹ Attari Report ¶166.

⁶⁰ “In a market with no auto correlation [sic], I would expect the sign to change.” Attari Deposition 93:8-10.

⁶¹ Attari Deposition 91:15-92:2.

⁶² Attari Report ¶69, ¶96.

average weekly trading volume easily surpass the one and two percent thresholds cited in *Cammer* and, thus, are indicative of efficient markets.⁶³

29. Dr. Attari does not dispute that (1) analyst coverage cited in my report is relevant to the analysis of preferred stock⁶⁴ or (2) analysts were following the financial reports of the company.⁶⁵ Dr. Attari, however, overlooks that analyst recommendations and price targets for the Common Stock would be critical inputs into the valuation of Miller Energy Preferred Securities. More specifically, the price targets themselves suggest how large analysts believe the common equity cushion will be, their financial projections would be relevant to evaluating the ability to pay preferred dividends, and analysts specifically discussed Miller Energy Preferred Securities and commented upon the likelihood that the Company would continue to pay the preferred dividends, the Company's debt, and the solvency of the Company, all of which had a direct bearing on investors in Miller Energy Preferred Securities.⁶⁶ Dr. Attari's suggestion that this *Cammer* factor is not met because the analysts did not issue a specific price target or recommendation for Miller Energy Preferred Securities has no justifiable economic basis. Indeed, Dr. Attari admits that he has "no academic research supporting [his] position that in order for an analyst report to be relevant to *Cammer* Factor 2, it must have a price target and a

⁶³ *Cammer*, 711 F. Supp. at 1293 (citing Bromberg & Lowenfels).

⁶⁴ Dr. Attari admits that most factors in analyst reports are relevant to holders of Series C and Series D preferred stock. ("Q: So you agree that the analyst reports, revenue projections, earnings projections, profitability and share price targets were relevant to preferred security holders? A. The share price targets have to do with the common. So they would not be relevant to the preferred stockholders directly. The rest of it would have some relevance, yes.") Attari Deposition 31:21-32:5. See also Attari Deposition 141:24-142:1.

⁶⁵ Attari Deposition 27:16-20.

⁶⁶ "TURNING THE CORNER: Kitchen Sink of a Quarter Could Mark a Bottom, New Strategy in Place," MLV & Co. LLC, December 10, 2014., "LOWERING TARGET: Notices Raise Concerns, But Liquidity Appears Stable, Maintain Buy Rating," MLV & Co. LLC, May 1, 2015., and "MILL releases unaudited fourth quarter and fiscal 2015 results," Noble Financial Capital Markets, July 30, 2015. See also Attari Deposition 31:21-32:24.

buy, hold or sell recommendation on it.”⁶⁷ While the analyst reports may not have explicitly addressed every aspect of what preferred stockholders might care about, that does not mean their presence is irrelevant to market efficiency for Miller Energy Preferred Securities.

30. Dr. Attari’s suggestion that the market maker factor is not supported for Miller Energy Preferred Securities is simply incorrect. As described in my Report, the language from *Cammer* is:

For over the counter markets without volume reporting, the number of market makers is probably the best single criterion. Ten market makers for a security would justify a substantial presumption that the market for the security is an efficient one; five market makers would justify a more modest presumption.⁶⁸

31. As stated in my Report, Miller Energy Preferred Securities traded on the NYSE and therefore did not trade in an “over the counter market without volume reporting.” In that circumstance, counting market makers is not even relevant. Notably, Dr. Attari admits that the NYSE operates differently than the over the counter market, and that it does not require market makers to create liquidity.⁶⁹ He additionally acknowledges precedent that a security’s listing on the NYSE makes it likely to trade efficiently.⁷⁰

32. Dr. Attari acknowledges Miller Energy was S-3 eligible from the initial offerings of both Miller Energy Preferred Securities until December 1, 2014.⁷¹ The fact that Miller Energy

⁶⁷ Attari Deposition 175:6-12. (“Q. But you have no academic research supporting your position that in order for an analyst report to be relevant to Cammer Factor 2, it must have a price target and a buy, hold or sell recommendation on it; correct? A. Yes, correct.”)

⁶⁸ *Cammer*, 711 F. Supp. at 1293 (citing Bromberg & Lowenfels).

⁶⁹ Attari Deposition 61:13-22, 62:11-15.

⁷⁰ Attari Deposition 115:22 – 116:3 (“Q: In the EGC case we were discussing earlier, you claimed that the courts recognize that securities that trade or listed on the New York Stock Exchange are likely to be efficient, didn’t you? A. Likely to be, yes.”)

⁷¹ Attari Report ¶192; Attari Deposition 118:23-119:12.

became ineligible to file a Form S-3 after it failed to timely file one of its Forms 10-K toward the end of the Analysis Period is not evidence of inefficiency of the market generally, and there is no reason to believe that moving from eligibility to ineligibility because of a late filing suddenly introduces market inefficiency when other factors point to continued efficiency during that period (like the volume and cause and effect among others).⁷²

33. The purpose of analyzing a company's market capitalization is not to see whether a particular security of a company is well capitalized, but to see whether the company as a whole is well-capitalized. Dr. Attari agrees that if the *Krogman* factor concerns the capitalization of the company (which the language of the *Krogman* court makes clear it does), analyzing the capitalization of Miller Energy Preferred Securities in isolation is incorrect.⁷³ Nonetheless, Dr. Attari claims that the individual low market capitalization of Miller Energy Preferred Securities at the end of the Analysis Period is an indicator of inefficient markets.⁷⁴ However, the low market capitalization witnessed late in the Analysis Period was driven by declines in prices, not the lack of capitalization generally. As such, Dr. Attari provides insufficient evidence that this factor is indicative of market inefficiency.

34. Dr. Attari does not dispute that the bid-ask spreads on the Series C and Series D Preferred Stock were low until the last eight months of the Analysis Period.⁷⁵ However, he asserts that the high bid-ask spreads on the Series C and Series D Preferred Stock over the final

⁷² Dr. Attari is unaware of "any empirical support that a market becomes less efficient when it moves from S-3 eligible to S-3 ineligible." Attari Deposition 73:16-20.

⁷³ Attari Deposition 77:6-13.

⁷⁴ Attari Report ¶182.

⁷⁵ Coffman Report §VII.H, Attari Report §VII.E.7, and Attari Deposition 78:21-79:5.

eight months of the Analysis Period are indicative of inefficient markets.⁷⁶ The increase in the bid-ask spreads of Miller Energy Preferred Securities were driven by declines in price, not because the markets generally became less efficient. As the prices of the Preferred Securities fell to low-levels, the bid-ask spreads as a percentage of the shares' prices increased because price level is an important determinant of bid-ask spread.⁷⁷ For example a bid-ask spread of \$0.05 on a stock trading at \$10 a share is a substantially smaller percentage spread than a \$0.05 spread on a share trading at \$1 a share.⁷⁸

35. As I stated in my Report, “for all quarterly lists starting in the third calendar quarter of 2012 (when Series C Preferred Stock began trading) and ending at the end of the Analysis Period, the Preferred Securities were not labelled as Section 13F Securities, meaning institutions were not required to report their holdings of the Miller Energy Preferred Securities.”^{79,80} Data on the institutional ownership of Miller Energy Preferred Securities, therefore, is limited to only those institutions voluntarily electing to report their holdings of these shares. Reporting institutions that held Miller Energy Series C Preferred Stock included Brick Asset Management Inc, Crow Point Partners, LLC, Quadrant Capital Group, Spirit of America Management Corp, Scholtz & Co LLC, Swiss-Asia Financial Services Pte Ltd and Theme/Value Investments.⁸¹ Reporting institutions that held Miller Energy Series D Preferred Stock included Wells Fargo

⁷⁶ Attari Report ¶194.

⁷⁷ Harris, Lawrence E., “Minimum Price Variations, Discrete Bid-Ask Spreads and Quotation Sizes,” *The Review of Financial Studies*, v.7 (1), Spring 1994, pp. 149-178.

⁷⁸ “I’m aware of the academic literature that says that lower-priced securities have wider bid ask spreads proportionately.” Attari Deposition 79:13-20.

⁷⁹ Coffman Report, footnote 34.

⁸⁰ Dr. Attari also determined that institutional data was unavailable for the preferred securities. (Attari Deposition 83:9-14.)

⁸¹ Data on institutional holdings obtained from Bloomberg using the HDS function.

and Co, Spirit of America Management Corp, Sun Life Financial Inc, and Teachers Insurance & Annuity of America. Dr. Attari concedes that “Institutional ownership is not an explicitly recognized factor like the Cammer Factors or the Krogman Factors.”⁸² Therefore, the limited data available on institutional holdings of Miller Energy Preferred Securities does not suggest market inefficiency. At worst, the limited amount of data on the institutional holdings of the Miller Energy Preferred Securities renders this factor agnostic regarding this efficiency factor.

G. MY METHODOLOGY FOR EVALUATING MARKET EFFICIENCY FOR THE PREFERRED SECURITIES IS RELIABLE AND MY OPINIONS ARE UNIMPACTED BY ANY OF DR. ATTARI’S CRITICISMS

36. Dr. Attari identified three purported “errors” in my calculation of returns of the Preferred Securities that are part of my event study analysis. None of these purported “errors” are related to the general methodology I employed for analyzing market efficiency and none of them impact the ultimate conclusions or opinions that flow from that methodology (nor does Dr. Attari claim they do).

i. THE USE OF DIVIDEND ADJUSTED RETURNS FOR THE PREFERRED SECURITIES

37. Dr. Attari claims that I should have computed returns for the Series C and Series D Preferred Securities in a manner that adjusts for the payment of dividends. As Dr. Attari notes, the label of the return series in my backup material (ret_MILL_PRC_**div_adj** and ret_MILL_PRD_**div_adj**) is consistent with my intent to compute dividend adjusted returns, not that I was unaware that such an adjustment was necessary. Adjusting for dividend payments is

⁸² Attari Report ¶183.

appropriate and was my intention.⁸³ As noted by Dr. Attari, this error affects a small minority of returns (10 out of 706 for Series C and 6 out of 460 for Series D).

38. The incorporation of dividend adjusted returns for Preferred Series C and Preferred Series D does not impact the results or conclusions in any meaningful way (nor does Dr. Attari suggest it does). For the Series C Preferred Stock, as shown by **Rebuttal Exhibit 4**, the incorporation of dividend adjusted returns does not change the proportion of news days with significant returns, changes the average absolute abnormal return for those days by a negligible 0.02% and does not affect the volume at all. Meanwhile, as **Rebuttal Exhibit 5** illustrates, for the Series D Preferred Stock, there is no change whatsoever to the proportion of news days with significant returns, or the volume, and the average absolute abnormal return changes by 0.02%. The statistical tests of whether the news dates have a greater proportion of statistically significant returns and whether the average absolute returns are higher on news days relative to “no news” days remains statistically significant at far greater than the 99% confidence level, affirming my conclusion that the markets for Miller Energy Preferred Securities were efficient.

39. This criticism, thus, has no substantive influence either on my specific conclusion that there is evidence of a cause and effect relationship or my ultimate conclusion that Miller Energy Preferred Securities traded in efficient markets. It further does not suggest in any way that my analysis is unreliable.

⁸³ In the process of handling the data, a member of my staff manually replaced the dividend-adjusted returns within a spreadsheet and failed to realize the manual calculations erroneously and inadvertently eliminated the dividend adjustment. I take responsibility for not catching this inadvertent, and ultimately inconsequential, calculation error.

**ii. THE USE OF THE INTERCONTINENTAL EXCHANGE WTI
LIGHT SWEET CRUDE OIL FUTURES INDEX**

40. Dr. Attari claims that the index I used to control for changes in the price of oil was not the “NYMEX WTI Light Sweet Crude Oil Futures Index” but instead the “ICE WTI Light Sweet Crude Oil Futures Index.”⁸⁴ As indicated by Dr. Attari, there is no substantive difference in the economic meaning or value of these indices.⁸⁵ Both are meant to track the market price of the same underlying commodity – “West Texas Intermediate oil.”⁸⁶ The indices are both constructed by referencing prices for short term futures contracts covering the same commodity.⁸⁷ The NYMEX Oil Futures Index tracks futures prices from the New York Mercantile Exchange, while the ICE Oil Futures Index tracks futures contracts from the Intercontinental Exchange.⁸⁸ As one would expect, since both of these indices are meant to generally track the same underlying commodity, the prices are highly consistent, as shown in the chart below. The correlation coefficient between the indices is over 97%.

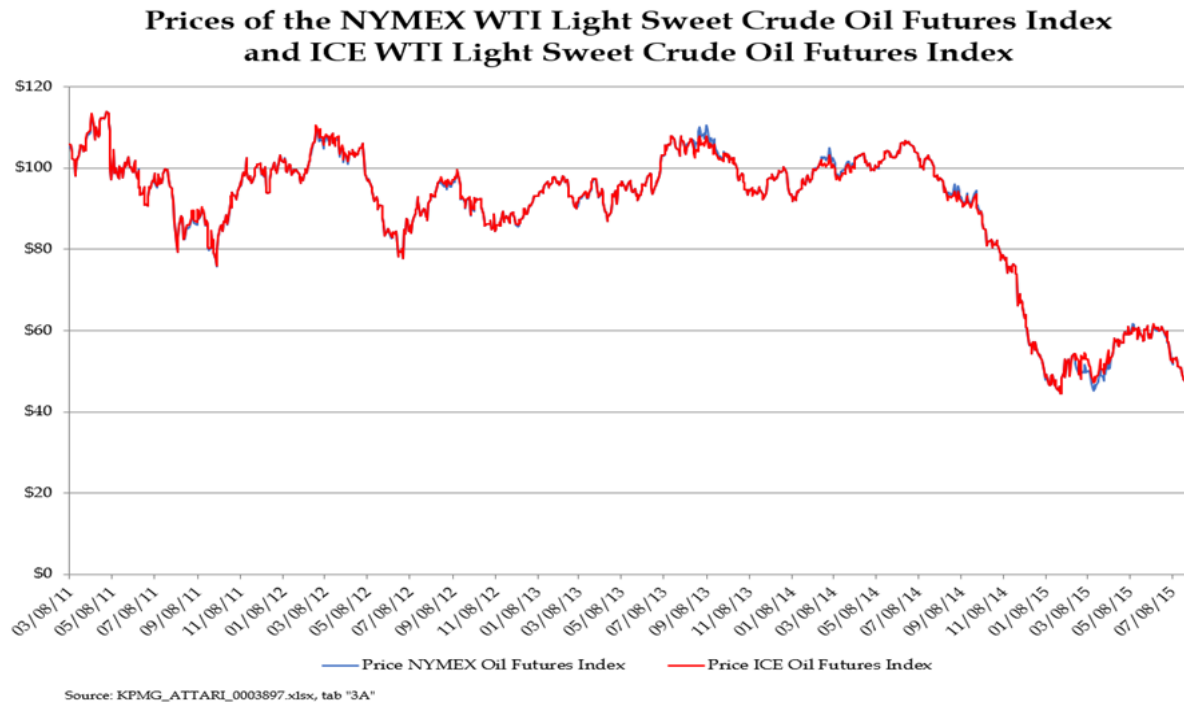
⁸⁴ Attari Report ¶34.

⁸⁵ Attari Report ¶38.

⁸⁶ Dr. Attari agrees on this point. (Attari Deposition 156:17-22.)

⁸⁷ Attari Report ¶¶42-44.

⁸⁸ <https://www.cmegroup.com/trading/why-futures/welcome-to-nymex-wti-light-sweet-crude-oil-futures.html> (accessed May 30, 2019) and <https://www.theice.com/products/213/WTI-Crude-Futures> (accessed May 30, 2019).



41. Given that, it should come as no surprise that using the NYMEX index⁸⁹ has no impact on my conclusions. More specifically, for the news days I analyze, the use of the NYMEX Oil Futures Index does not change the proportion of days that are significant, changes the average absolute return by 0.05% and 0.11% for the Series C Preferred Stock and Series D Preferred Stock respectively, and does not impact the average volume of shares traded. All of the comparisons against the “no news” days remain statistically significant at or above the 95% significance level. See **Rebuttal Exhibit 6**, and **Rebuttal Exhibit 7**, which show the differences for each of the Miller Energy Preferred Securities from the originally filed exhibits.⁹⁰

⁸⁹ I instructed my staff to download the NYMEX WTI Light Sweet Crude Oil Futures Index. A staff member incorrectly downloaded the data for the “ICL” ticker instead of the “CL” ticker, confusing one for the other.

⁹⁰ The use of the NYMEX for Miller Energy Common Stock also has no impact on my conclusions. For the news days I analyze, the use of the NYMEX Oil Futures Index does not change the proportion of days that are significant, changes the average absolute return by 0.03%, and does not impact the average volume of shares traded. See **Rebuttal Exhibit 1** for the differences for Miller Energy Common Stock from the originally filed exhibits.

42. Moreover, setting aside the inconsequential difference in these indices, I demonstrated in my Report that my result was robust to another alternative index of oil companies, specifically, the Dow Jones US Exploration and Production Index.⁹¹ In other words, I never suggested that the NYMEX Index was the one and only possible choice of indices in the first place. Certainly, the ICE Index I used is also a valid control for oil prices, which was the overall intent of the analysis.

43. This criticism, thus, has no substantive influence either on my results or on my ultimate conclusion that Miller Energy Preferred Securities traded in efficient markets. It further does not suggest in any way that my analysis is unreliable.

iii. THE COMPUTATION OF THE “OIL PRICE INDEX” RETURN

44. Dr. Attari argues that it was improper to rely on a third-party constructed price index to control for the price of oil because of the method by which the index was constructed.⁹² He is wrong. Financial economists regularly use third-party price indices to control for market or industry factors without dissecting all of the construction techniques and evaluating if there are better ways to construct the series.⁹³ The index I relied upon is a price index constructed by a

⁹¹ Initial Coffman Report, footnote 52 and Coffman Report, footnote 63.

⁹² Attari Report ¶¶40-45.

⁹³ As a case in point, Dr. Attari himself used a third-party produced control index in a prior report that did not incorporate dividend adjustments (*See*, Expert Report of Dr. Mukarram Attari, in Dalton Petrie, et al, v Electronic Game Card, Inc., et al, and Penny Pace, et al, v. Timothy Quintanilla, et al, No. 10-0252 and 14-2067, filed June 1, 2015 (C.D. California).

In that particular case, he controls for market factors by using the NASDAQ Composite Index, which is not a total return index that adjusts for dividends (*See*, Nasdaq Composite Index Methodology at https://indexes.nasdaqomx.com/docs/methodology_COMP.pdf (“The price return index in USD (Nasdaq: COMP) is ordinarily calculated without regard to cash dividends on Index Securities.”)).

In other words, he relied on a third-party index that commits the same purported error that he accuses me of committing. He did not scrutinize the construction of that index to evaluate if there were hypothetically better ways to construct it.

reputable third party that is intended to track the market price of WTI Oil. I used the price index as provided to control for the price of oil. Dr. Attari's criticism of my approach is, at best, a matter of statistical judgment and does not reflect an error in my methodology.

45. Nevertheless, I demonstrate that even if I had undertaken the procedure suggested by Dr. Attari, my conclusion of a cause and effect relationship between new news and changes in the market price of Miller Energy Preferred Securities is not impacted. (see **Rebuttal Exhibit 9 and Rebuttal Exhibit 10**). More specifically, for the news days I analyze, the use of the procedure suggested by Dr. Attari does not change the proportion of days that are significant and does not impact the average volume of shares traded.⁹⁴ I analyzed both the raw returns I originally used and the dividend adjusted returns using Dr. Attari's proposed methodology for both the Series C and Series D Preferred Stock. **Rebuttal Exhibit 9 and Rebuttal Exhibit 10** show that the use of Dr. Attari's proposed method changes the average absolute return by an inconsequential 0.01% and 0.10%, respectively, when analyzing the dividend adjusted returns for Miller Energy Series C and Series D Preferred Stock.⁹⁵ All of the comparisons against the "no news" days remain statistically significant at or above the 95% significance level for the Miller Energy Preferred Securities. My conclusion that there is scientific evidence of a cause and effect relationship is not sensitive to my use of the WTI Oil index with or without the alterations to the index suggested by Dr. Attari.

46. In summary, the methodology I employed in my Report is reliable, and is consistent with the same methodology I have employed in dozens of other reports in which a class has been

⁹⁴ As illustrated by Rebuttal Exhibit 8, the use of Dr. Attari's procedure changes the average absolute return by an inconsequential 0.02% on the earnings days that I analyzed for Miller Energy Common Stock. This does not change my conclusions about the market efficiency of Miller Energy Common Stock.

⁹⁵ Additionally, Rebuttal Exhibits 9 and 10 illustrate that even when analyzing the raw returns for the Miller Energy Securities, the average absolute abnormal return changes by 0.02% for Miller Energy Series C Preferred Stock and by 0.10% for Miller Energy Series D Preferred Stock.

certified. I have further demonstrated that correcting the purported data errors identified by Dr. Attari does not influence the outcome of any of my analyses. In fact, I have demonstrated that my conclusions are robust to those changes and Dr. Attari's additional criticisms (with which I disagree).

IV. DR. ATTARI INCORRECTLY ASSERTS THAT NEITHER SECTION 10(b) NOR SECTION 11 DAMAGES CAN BE CALCULATED ON A CLASS-WIDE BASIS

A. DR. ATTARI'S CLAIM THAT SECTION 10(b) DAMAGES CANNOT BE CALCULATED ON A CLASS-WIDE BASIS RELIES ENTIRELY ON A MISREPRESENTATION OF PLAINTIFFS' PROPOSED DAMAGES MODEL

47. Plaintiffs are pursuing the standard "out of pocket" measure of damages in this case. Under this methodology, damages are formulaically calculated as the artificial inflation per share at the time of purchase less the artificial inflation at the time of sale (or, if the share is not sold before full revelation of the fraud, the artificial inflation at the time of purchase, subject to the Private Securities Litigation Reform Act of 1995's "90-day lookback" provision, a formulaic limit on damages that also can be applied class-wide).⁹⁶ This methodology is regularly accepted by courts in securities fraud class actions similar to this one. Dr. Attari does not suggest that this methodology is inappropriate. Under this methodology, there is no need to separate investors between the "low risk" and "high risk" investors he identifies.⁹⁷ As is standard, the out of pocket

⁹⁶ Specifically, the Private Securities Litigation Reform Act of 1995 states: "...in any private action arising under this title in which the plaintiff seeks to establish damages by reference to the market price of a security, the award of damages to the plaintiff shall not exceed the difference between the purchase or sale price paid or received, as appropriate, by the plaintiff for the subject security and the mean trading price of that security during the 90-day period beginning on the date on which the information correcting the misstatement or omission that is the basis for the action is disseminated to the market." *See*, Private Securities Litigation Reform Act of 1995, dated December 22, 1995, 737, 748-49.

⁹⁷ Dr. Attari admits that this understanding comes "from discussions with counsel and from a review of an opinion in, I think, the BP case." Dr. Attari admits that if this understanding is incorrect (which it is), then "all investors are treated the same" and his opinions would no longer apply. Attari Deposition 99:5 – 100:16.

methodology assumes investors would have still purchased the relevant security at the time they did. But it assumes the transaction would have occurred at a different price had the full truth been disclosed.

48. While Dr. Attari claims it is inappropriate to take the full decline on all of the corrective disclosures and assume that investors can recover that full amount regardless of when they purchased and what the facts would establish about how much of the artificial inflation was present at the time of purchase,⁹⁸ I never suggested in my Report or deposition that artificial inflation would be quantified in that manner. Instead, Dr. Attari ignores what is stated in my Report and deposition and draws what appears to be a legal inference from the use of a particular phrase in the Complaint that Plaintiffs are seeking something other than the standard out of pocket damages.

49. Defendant suggests that use of the phrase “materialization of the risk” in the Complaint implies that I am supporting a method (or Plaintiffs are requesting a method) that deviates from the “out of pocket” methodology identified in my Report. Defendants cite to my testimony in *Ludlow v BP, L.P.C.*, as purported evidence that my methodology for calculating Section 10(b) damages is unreliable.⁹⁹ However, the nature of the claims in the “pre-spill class” in the Ludlow matter were fundamentally different as a matter of economics than the claims at issue in this case.¹⁰⁰ Further, in the *Ludlow* case, I explicitly acknowledged I was deviating from

⁹⁸ Attari Report ¶207.

⁹⁹ KPMG LLP’S Memorandum of Law in Support of its Motion to Exclude the Reports and Testimony of Chad Coffman, filed May 21, 2019 No. 3:16-cv-00121-TAV-DCP (E.D. Tennessee) §1. B.

¹⁰⁰ The pre-spill subclass sought to recover consequential damages related to the post-spill stock price decline. In so doing, the pre-spill subclass “expressly eschew[ed]” the traditional out-of-pocket damages calculation method advanced by Plaintiffs in typical securities litigation. See Memorandum and Order filed May 20, 2014, in re: BP p.l.c Securities Litigation, MDL No: 10-md-2185, Civil Action No. 4:10-md-2185 (S.D. Texas).

the standard methods for quantifying artificial inflation based on the legal theory being put forward by plaintiffs' counsel there. That case also had a "post-spill class" for which the standard out of pocket method was employed. That subclass was certified.¹⁰¹

50. My articulation of the standard out of pocket damages formula is ubiquitous in class action securities litigation and has been deemed proper and sufficient by numerous courts considering class certification in this context.¹⁰²

B. PROVING TRACEABILITY IS NOT REQUIRED TO DEMONSTRATE DAMAGES FOR THE SECTION 11 CLASS

51. Dr. Attari conflates the issue of whether any particular investor can establish traceability based upon submitting a claim in this matter versus whether damages can be calculated subject to a common methodology. Further, Dr. Attari does not dispute the statutory damages formula articulated in my Report (and reiterated it in his own report) for those that can establish traceability. Indeed, Dr. Attari readily computed statutory damages for Mr. Ziesman assuming he could prove traceability to either of the relevant offerings.¹⁰³ Moreover, his conclusion is predicated on "without knowing which issuance the shares that they purchased came from."¹⁰⁴ Thus, there is no relevant dispute about whether damages can be computed conditional upon an investor demonstrating traceability.

52. I understand traceability is established through the submission of claims. Those investors that can prove they purchased shares directly in the offering can establish traceability.

¹⁰¹ See Memorandum and Order filed May 20, 2014, in re: BP p.l.c Securities Litigation, MDL No: 10-md-2185, Civil Action No. 4:10-md-2185 (S.D. Texas).

¹⁰² Dr. Joseph Kasper v AAC Holdings et al, No. 15-cv-00923-JPM-jsf (M.D. Tennessee); Hatamian v. Advanced Micro Devices, Inc., No. 4:14-cv-00226 (N.D. Cal.); Laborers Pension Trust Fund – Detroit, vs. Conn's, Inc., 4:14-cv-00548 (S.D. Tex.); and Leon D. Milbeck v. TrueCar Inc, No. 2:18-cv-02612 (C.D. Cal.), to name but a few.

¹⁰³ Attari Report ¶85.

¹⁰⁴ Attari Report ¶¶86 and 111.

This could be shown through underwriter records or investor records that are consistent with direct purchases from an underwriter at the offering prices. Whether any after-market purchasers can establish traceability is unknown. To simply conclude they cannot is unnecessarily speculating about what evidence class members might be able to present regarding traceability. As acknowledged by Dr. Attari, his statement that after-market purchasers “cannot” trace their shares to an offering is speculative.¹⁰⁵ It is not at all clear what evidence might exist that could establish traceability, but it is presumptuous to claim it cannot exist. Dr. Attari himself provides one possibility¹⁰⁶, and I see no economic reason (and Dr. Attari certainly does not provide one) to pro-actively exclude all after-market purchasers from the putative class when there are circumstances where such individuals could be class-members.¹⁰⁷

53. Additionally, Dr. Attari incorrectly claims that it is impossible to establish traceability for Series C and Series D Preferred Stock because the issued and outstanding shares of these securities were held in book-entry form at the Depository Trust Company.¹⁰⁸ Dr. Attari correctly notes that the Depository Trust Company was established in 1973 and makes “book-entry” changes to ownership of the securities.¹⁰⁹ Dr. Attari acknowledges that the “overwhelming majority of investors in U.S.-based market do not have shares certificates, but instead hold their shares in book entry form in the DTC.”¹¹⁰ In spite of this, Dr. Attari maintains his claim that no

¹⁰⁵ Attari Report ¶¶80-81, 107.

¹⁰⁶ Attari Report ¶80.

¹⁰⁷ Attari Report ¶79.

¹⁰⁸ Attari Report ¶¶64-67, 95.

¹⁰⁹ DTCC, “The Depository Trust Company (DTC),” <http://www.dtcc.com/about/businesses-and-subsidiaries/dtc>” (accessed on June 7, 2019).

¹¹⁰ Attari Deposition 111:4-9.

after-market purchasers can trace their shares to an offering in virtually all Section 11 cases.¹¹¹

However, Dr. Attari fails to mention that Section 11 cases including aftermarket purchasers have been filed and routinely certified subsequent to the founding of the Depository Trust Company. I do not see a way to reconcile Dr. Attari's position with the presence of these certified cases.

54. Further, assessing damages is separate from assessing traceability. The definition of the Section 11 Class clearly separates traceability from damages.¹¹² My report predicates the calculation of damages upon the establishment of traceability.¹¹³ ¹¹⁴ Whether or not a putative class member that can prove traceability is damaged under the statute is ascertainable with trading records. This is no different than for any investor in a garden variety securities case where putative class members must establish they are in the class and damaged through the claims process.

55. In the typical expert report at the merits phase of litigation, plaintiffs ask the finder of fact to establish the inflation per share in the security. Then, post-verdict, trading records are submitted to establish whether the investor is in the class and the damages are calculated formulaically based upon the out of pocket method using the quantification of the inflation per

¹¹¹ "Q. You state [in the Attari Report], 'after-market purchasers, those who purchase their shares in open-market trading, not directly in one of the public offerings, cannot trace their shares to these offerings'...that is true for virtually any after-market purchaser bringing a Section 11 claim, not just investors in Miller Energy's Series C and Series D; correct? A. That is true for any investor trading in the secondary market." Attari Deposition 112:11 – 113:7.

¹¹² Complaint ¶33. Plaintiffs define the Class as "All those who purchased Miller Energy preferred shares pursuant to or traceable to the Offering Documents (the 'Section 11 Class')."

¹¹³ Coffman Report ¶101. "Section 11 damages can be calculated for the members of the Section 11 Class, all those who purchased Miller Energy Series C Preferred Stock and Miller Energy Series D Preferred Stock 'pursuant to or traceable to the Offering Documents' issued during the Class Period."

¹¹⁴ Dr. Attari himself acknowledges that damages could be computed given basic trade details. "If you had their purchase and sale information, you could compute the damages to that investor for people who purchase in the offering." Attari Deposition 110:1-4.

share during the Class Period. The same is true for the Section 11 Class, with the only difference being that membership in the class also depends on traceability. For those that can establish traceability through the claims process, damages are calculable formulaically under the statute (as indicated by Dr. Attari and consistent with a prior Order in the Gaynor matter).¹¹⁵

V. I PROVIDED STRONG SCIENTIFIC STATISTICAL EVIDENCE THAT THE ALLEGED MISSTATEMENTS IMPACTED THE PRICE OF MILLER ENERGY SECURITIES

56. I understand the Defendant has the burden to establish lack of price impact. To establish lack of price impact, Dr. Attari must show a lack of price impact on both the front end and back end. He does not even try to establish lack of price impact upon corrective disclosures, whereas I show below that there are significant declines on at least some of alleged corrective disclosures. Dr. Attari provides no opinion regarding negative causation¹¹⁶ and did not analyze all of the alleged corrective disclosures.¹¹⁷ Additionally, he acknowledges there was price increase with KPMG's first alleged false statements, but offers no opinion regarding whether those statements contributed to the price increase.

57. Dr. Attari's only opinion is that I do not provide sufficient evidence to prove there was a positive price impact at the time of KPMG's alleged first false statement.¹¹⁸ However, Dr. Attari's opinion is based upon a fundamentally flawed analysis of the events leading up to the August 29, 2011, release of Miller Energy's final audited version of the Form 10-K/A with KPMG's first audit opinion. Indeed, there is strong economic evidence of price impact for this event.

¹¹⁵ Attari Report ¶83. See *Gaynor v. Miller*, No. 15-cv-545, 2018 WL 3751606 (E.D. Tenn. Aug. 6, 2018).

¹¹⁶ Attari Deposition 114:7-10.

¹¹⁷ Attari Deposition 170:3-16.

¹¹⁸ Attari Report § IX.

58. Dr. Attari and I both find that there is a statistically significant price reaction to the release of Miller Energy's final audited version of the Form 10-K/A with KPMG's audit opinion on August 29, 2011, and he does not and cannot definitively rule out that it reflected the impact of the alleged fraud.¹¹⁹ Dr. Attari has suggested that the loan agreement with Guggenheim Corporate Funding may have caused some of the stock price increase on August 29, 2011.¹²⁰ However, an analyst cut his price target for Miller Energy Common Stock as a result of the amended loan agreement, indicating that this news was interpreted negatively by investors.¹²¹ Dr. Attari confirmed this negative interpretation at his deposition and offers no rationale for how or why this information would lead to an increase in price.¹²²

59. Furthermore, Dr. Attari's reference to the results of the internal investigation as a reason for the price increase are (1) directly related to the allegedly false audit report and (2) not even mentioned by analysts as relevant new information. As a result, this information is either irrelevant to price impact or inseparable from the underlying accounting conduct. The release of the KPMG audit report resolved the questions surrounding whether Miller Energy would be able to publish a Form 10-K consistent with its prior accounting with the blessing of an auditor.

60. The market viewed the filing of KPMG's audit report as a critical, positive development.¹²³ The market price of Miller Energy climbed by over 50% on a single day.

¹¹⁹ Attari Report ¶ 217 ("The events leading up to the August 29, 2011 10-K filing make it difficult, if not impossible, to conclude that KPMG's alleged false audit opinion caused inflation in the common stock on that date.")

¹²⁰ Attari Report ¶217. d.

¹²¹ "Miller Energy Resources: Slightly Lower On Higher Payments, Timing of Production Key," *SunTrust Robinson Humphrey*, August 30, 2011.

¹²² Attari Deposition 160:19-161:17, 163:4-164:4.

¹²³ Coffman Report ¶¶vi -xiii.

Indeed, my event study indicates that the market price of Miller Energy Common Stock increased by 57.85%, after controlling for market and industry effects and that this abnormal price increase is statistically significant at the 99% confidence level with a t-statistic of 13.96.¹²⁴ Dr. Attari notes that the market price of Miller Common Stock increased (before controlling for market factors) by 60.8% on August 29, 2011.¹²⁵ It is highly unlikely that this marked price increase would have been possible had Miller Energy been unable to publish a Form 10-K without KPMG's imprimatur.

61. With respect to additional audit opinions issued later in the Class Period, as a matter of economic theory, it is unsurprising that there is no observable stock price increase. Going forward, it would be reasonable for the market to expect KPMG to continue to sign off on Miller Energy's valuation of the Alaska Assets as compliant with GAAP since it had already done so. Therefore, such statements would maintain, rather than increase, any artificial inflation because KPMG's further audit opinions would not have been unexpected.

62. Additionally, Dr. Attari fails to acknowledge that there were statistically significant stock price declines on alleged corrective disclosures. For example, the alleged corrective disclosure on December 24, 2013 saw statistically significant negative abnormal returns for both Miller Energy Preferred Securities. On this day, a report entitled 'Miller Energy: Digging Itself Into Another Deep Hole?' was published by TheStreetSweeper and described that Miller Energy was facing serious debt and financing issues.¹²⁶

63. Following the filing of the Form 8-K with the Securities and Exchange Commission and subsequent press release on July 14, 2014, an investor call held after trading hours on July

¹²⁴ Coffman Report ¶xii.

¹²⁵ Attari Report ¶217. d.

¹²⁶ Complaint ¶200.

15, 2014, likely also contributed to the decline in Miller Energy Common Stock. During that call, CFO John Brawley acknowledged that costs and expenses were high, including DD&A expenses, and acknowledged that poor net income and earnings per share numbers were items that “a number of our shareholders focus on.” Brawley also acknowledged that Miller Energy’s internal controls were still deficient but touted the hiring of “a junior accountant with big four accounting experience” as a reason for investors to be optimistic.¹²⁷

64. Further, on October 13, 2014, after trading hours, Reuters reported that Brean Capital, a firm whose analyst had been following Miller Energy closely, cut its price target of Miller Energy from \$9 to \$7.¹²⁸ This led to a statistically significant decline in the price of Miller Energy Securities. On both of these days, information was publicly released that cast doubt on KPMG’s valuation and audit of Miller Energy assets.

65. Miller Energy Common Stock experienced a statistically significant negative abnormal return on the December 1, 2014 alleged corrective disclosure, and Miller Energy Preferred Series C Stock experienced a negative statistically significant abnormal return on the December 5, 2014 alleged corrective disclosure.¹²⁹ Both of these alleged corrective disclosures stemmed from analysts reducing their price targets for Miller Energy Common Stock.

66. On April 29, 2015, after market hours, Miller Energy filed a Form 8-K, attaching a press release in which it announced that it had received a “Wells Notice” from the SEC indicating that the agency staff had made a preliminary determination to recommend civil action against the Company related to its accounting for its Alaska Assets, in addition to a continued

¹²⁷ “Glacier Oil & Gas Corp. FQ4 2014 Earnings Call Transcripts” S&P Capital IQ. 15 July 2014.

¹²⁸ Complaint ¶214.

¹²⁹ Complaint ¶¶216-217.

listing notice from the NYSE.¹³⁰ All three Miller Energy Securities experienced statistically significant price declines on this day.

67. On May 6, 2015, Miller Energy announced it was deferring dividend payments on its Series C and D Preferred Stock.¹³¹ On this day the Miller Energy Preferred Securities experienced statistically significant price declines.

68. Miller Energy released a Going Concern Warning on July 14, 2015 and subsequently had its securities delisted on July 31, 2015.¹³² Both of these events precipitated statistically significant declines in the Miller Energy Securities.

69. While I understand that any impact from these corrective disclosures could be confounded by other information released on those days, Dr. Attari has not scientifically established that the alleged corrective information did not have any impact on the price of the Miller Energy Securities on these alleged corrective disclosures. Dr. Attari does not even address any of the alleged corrective disclosures or their impact on the Miller Energy Securities in his report.

¹³⁰ “Press Release: Miller Energy Provides Details Concerning Recent Events Including Receipt of NYSE Continued Listing Notice,” *Dow Jones Newswires*, April 29, 2015.

¹³¹ “Press Release: Miller Energy Defers Cash Dividends on Its Series C and Series D Preferred Stock,” *Dow Jones Newswires*, May 6, 2015.

¹³² Complaint ¶¶ 226-227.

70. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.


Chad Coffman

Executed on June 14, 2019

Rebuttal Exhibit 1

Dr. Attari's Criticism That I Used the ICE WTI Oil Futures Index Rather Than The NYMEX WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Common Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism	
Statistic	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings
N	17	316 ⁽¹⁾	17	316 ⁽²⁾
Significant Days at 95% Confidence Level	3	14	3	12
% Significant Days at 95% Confidence Level	17.65% ⁽³⁾	4.43%	17.65% ⁽⁴⁾	3.80%
Average Absolute Abnormal Return	4.16% ⁽⁵⁾	2.52%	4.19% ⁽⁶⁾	2.52%
Average Volume (Millions)	0.71 ⁽⁷⁾	0.3	0.71 ⁽⁸⁾	0.3

Notes:

(1) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 316 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 316 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 17.65% rate of statistical significance is statistically significantly different than 4.43% at the 95% confidence level.

(4) 17.65% rate of statistical significance is statistically significantly different than 3.80% at the 95% confidence level.

(5) 4.16% absolute return is statistically significantly different than 2.52% based on a t-test for difference of means at the 95% confidence level.

(6) 4.19% absolute return is statistically significantly different than 2.52% based on a t-test for difference of means at the 95% confidence level.

(7) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

(8) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 2

Dr. Attari's Criticism That I Compare Material Announcement Dates Against No News Dates Over a Different Time Period Does Not Impact My Finding of Market Efficiency for Miller Energy Series C 10.75% Preferred Stock

Analysis Performed in Coffman Report No News Dates Analyzed From October 8, 2012 to July 31, 2015			Analysis Addressing Dr. Attari's Criticism No News Dates Analyzed From October 15, 2014 to July 31, 2015	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	192 ⁽¹⁾	9	56 ⁽²⁾
Significant Days at 95% Confidence Level	5	9	5	1
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	4.69%	55.56% ⁽⁴⁾	1.79%
Average Absolute Abnormal Return ⁽⁴⁾	27.34% ⁽⁴⁾	1.28%	27.34% ⁽⁴⁾	3.04%
Average Volume (Millions)	0.08 ⁽⁷⁾	0.02	0.08 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the period of 10/15/2014 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 56 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued.

(3) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 1.79% at the 99% confidence level.

(5) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(6) 27.34% absolute return is statistically significantly different than 3.04% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 3

Dr. Attari's Criticism That I Compare Material Announcement Dates Against No News Dates Over a Different Time Period Does Not Impact On My Finding of Market Efficiency for Miller Energy Series D 10.5% Preferred Stock

Analysis Performed In Coffman Report No News Days Analyzed From October 1, 2013 to July 31, 2015			Analysis Addressing Dr. Attari's Criticism No News Days Analyzed From October 15, 2014 to July 31, 2015	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	56 ⁽²⁾
Significant Days at 95% Confidence Level	5	4	5	3
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	3.39%	55.56% ⁽⁴⁾	5.36%
Average Absolute Abnormal Return	22.92% ⁽⁵⁾	2.09%	22.92% ⁽⁶⁾	3.74%
Average Volume (Millions)	0.13 ⁽⁷⁾	0.02	0.13 ⁽⁸⁾	0.03

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the period of 10/15/2014 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 56 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued.

(3) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 5.36% at the 99% confidence level.

(5) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(6) 22.92% absolute return is statistically significantly different than 3.74% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.13 million and 0.03 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 4

Dr. Attari's Criticism That I Used Raw Returns Versus Dividend Adjusted Returns Does Not Impact My Finding of Market Efficiency For Miller Energy Series C 10.75% Preferred Stock

Analysis Performed in the Coffman Report			Analysis Addressing Dr. Attari's Criticism Regarding the use of Dividend Adjusted Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	192 ⁽¹⁾	9	192 ⁽²⁾
Significant Days at 95% Confidence Level	5	9	5	9
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	4.69%	55.56% ⁽⁴⁾	4.69%
Average Absolute Abnormal Return	27.34% ⁽⁵⁾	1.28%	27.36% ⁽⁶⁾	1.29%
Average Volume (Millions)	0.08 ⁽⁷⁾	0.02	0.08 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(5) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(6) 27.36% absolute return is statistically significantly different than 1.29% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 5

Dr. Attari's Criticism That I Used Raw Returns Versus Dividend Adjusted Returns Does Not Impact My Finding of Market Efficiency For Miller Energy Series D 10.5% Preferred Stock

Analysis Performed in the Coffman Report			Analysis Addressing Dr. Attari's Criticism Regarding the use of Dividend Adjusted Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	118 ⁽²⁾
Significant Days at 95% Confidence Level	5	4	5	6
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	3.39%	55.56% ⁽⁴⁾	5.08%
Average Absolute Abnormal Return	22.92% ⁽⁵⁾	2.09%	22.94% ⁽⁶⁾	2.07%
Average Volume (Millions)	0.13 ⁽⁷⁾	0.02	0.13 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 5.08% at the 99% confidence level.

(5) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(6) 22.94% absolute return is statistically significantly different than 2.07% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 6
Dr. Attari's Criticism That I Used the ICE WTI Oil Futures Index Rather Than The NYMEX WTI Oil
Futures Index Does Not Impact My Finding of Market Efficiency for
Miller Energy Series C 10.75% Preferred Stock

Analysis Performed In Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & NYMEX CL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N ⁽¹⁾	9	192 ⁽¹⁾	9	192 ⁽²⁾
Significant Days at 95% Confidence Level	5	9	5	9
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	4.69%	55.56% ⁽⁴⁾	4.69%
Average Absolute Abnormal Return	27.34% ⁽⁵⁾	1.28%	27.29% ⁽⁶⁾	1.27%
Average Volume (Millions)	0.08 ⁽⁷⁾	0.02	0.08 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(5) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(6) 27.29% absolute return is statistically significantly different than 1.27% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 7

Dr. Attari's Criticism That I Used the ICE WTI Oil Futures Index Rather Than The NYMEX CL Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Series D 10.5% Preferred Stock

Analysis Performed In Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & NYMEX CL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	118 ⁽²⁾
Significant Days at 95% Confidence Level	5	4	5	5
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	3.39%	55.56% ⁽⁴⁾	4.24%
Average Absolute Abnormal Return	22.92% ⁽⁵⁾	2.09%	22.81% ⁽⁶⁾	2.11 %
Average Volume (Millions)	0.13 ⁽⁷⁾	0.02	0.13 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.24% at the 99% confidence level.

(5) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(6) 22.81% absolute return is statistically significantly different than 2.11% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 8
Dr. Attari's Criticism That I Incorrectly Computed the Returns of The ICE WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Common Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Dr. Attari's Calculations of the ICE WTI Oil Futures Returns	
Statistic	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings
N	17	316 ⁽¹⁾	17	314 ⁽²⁾
Significant Days at 95% Confidence Level	3	14	3	13
% Significant Days at 95% Confidence Level	17.65% ⁽³⁾	4.43%	17.65% ⁽⁴⁾	4.14%
Average Absolute Abnormal Return	4.16% ⁽⁵⁾	2.52%	4.14% ⁽⁶⁾	2.51%
Average Volume (Millions)	0.71 ⁽⁷⁾	0.3	0.71 ⁽⁸⁾	0.3

Notes:

(1) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 316 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 314 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 17.65% rate of statistical significance is statistically significantly different than 4.43% at the 95% confidence level.

(4) 17.65% rate of statistical significance is statistically significantly different than 4.14% at the 95% confidence level.

(5) 4.14% absolute return is statistically significantly different than 2.52% based on a t-test for difference of means at the 95% confidence level.

(6) 4.16% absolute return is statistically significantly different than 2.51% based on a t-test for difference of means at the 95% confidence level.

(7) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

(8) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 9

Dr. Attari's Criticism That I Incorrectly Computed the Returns of The ICE WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Series C 10.75% Preferred Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Raw Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns		Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N ⁽¹⁾	9	192 ⁽¹⁾	9	192 ⁽²⁾	9	192 ⁽³⁾
Significant Days at 95% Confidence Level	5	9	5	9	5	9
% Significant Days at 95% Confidence Level	55.56% ⁽⁴⁾	4.69%	55.56% ⁽⁵⁾	4.69%	55.56% ⁽⁶⁾	4.69%
Average Absolute Abnormal Return	27.34% ⁽⁷⁾	1.28%	27.32% ⁽⁸⁾	1.25%	27.33% ⁽⁹⁾	1.26%
Average Volume (Millions)	0.08 ⁽¹⁰⁾	0.02	0.08 ⁽¹¹⁾	0.02	0.08 ⁽¹²⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(5) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(6) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(7) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(8) 27.32% absolute return is statistically significantly different than 1.25% based on a t-test for difference of means at the 99% confidence level.

(9) 27.33% absolute return is statistically significantly different than 1.26% based on a t-test for difference of means at the 99% confidence level.

(10) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(11) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(12) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 10

Dr. Attari's Criticism That I Incorrectly Computed the Returns of The ICE WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Series D 10.5% Preferred Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Raw Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns		Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	118 ⁽²⁾	9	118 ⁽³⁾
Significant Days at 95% Confidence Level	5	4	5	3	5	5
% Significant Days at 95% Confidence Level	55.56% ⁽⁴⁾	3.39%	55.56% ⁽⁵⁾	2.54%	55.56% ⁽⁶⁾	4.24%
Average Absolute Abnormal Return	22.92% ⁽⁷⁾	2.09%	22.82% ⁽⁸⁾	2.07%	22.82% ⁽⁹⁾	2.05%
Average Volume (Millions)	0.13 ⁽¹⁰⁾	0.02	0.13 ⁽¹¹⁾	0.02	0.13 ⁽¹²⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(4) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(5) 55.56% rate of statistical significance is statistically significantly different than 2.54% at the 99% confidence level.

(6) 55.56% rate of statistical significance is statistically significantly different than 4.24% at the 99% confidence level.

(7) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(8) 22.82% absolute return is statistically significantly different than 2.07% based on a t-test for difference of means at the 99% confidence level.

(9) 22.82% absolute return is statistically significantly different than 2.05% based on a t-test for difference of means at the 99% confidence level.

(10) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(11) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(12) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

Appendix A

Documents Considered

Previous Reports in This Matter

- Expert Report of Chad Coffman, CFA, April 19, 2019, including all data and documents included in Appendix A of that report.
- Expert Report of Dr. Mukarram Attari, PhD, May 13, 2019, including all data, analyses, and back-up materials provided by Dr. Attari to counsel for Lead Plaintiff that Dr. Attari claims to have considered in connection with this report.

Court Documents

- Expert Report of Dr. Mukarram Attari, in Dalton Petrie, et al, v Electronic Game Card, Inc., et al, and Penny Pace, et al, v. Timothy Quintanilla, et al, No. 10-0252 and 14-2067, filed June 1, 2015 (C.D. California).
- *Gaynor v. Miller*, No. 15-cv-545, 2018 WL 3751606 (E.D. Tenn. Aug. 6, 2018)
- KPMG LLP’S Memorandum of Law in Support of its Motion to Exclude the Reports and Testimony of Chad Coffman, filed May 21, 2019 No. 3:16-cv-00121-TAV-DCP (E.D. Tennessee)
- Opposition of KPMG LLP to Plaintiff’s Motion to Certify the Classes, Appoint Class Representatives, and Appoint Class Counsel in *Lewis Cosby et al. vs KPMG LLP*, filed May 21, 2019, No. 3:16-cv-00121-TAV-DCP (E.D. Tennessee).
- Second Amended Class Action Complaint in *Lewis Cosby, et al. vs KPMG LLP*, filed September 15, 2017, No. 3:16-cv-00121 (E.D. Tennessee).

Depositions

- Deposition of Chad Coffman, CFA, April 12, 2019.
- Deposition of Chad Coffman, CFA, April 25, 2019.
- Deposition of Dr. Mukarram Attari, Ph.D. June 6, 2019.

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- *Cammer, et al., v. Bruce M. Bloom, et al.*, 711 F. Supp. 1264 (D.N.J. 1989).
- *Dr. Joseph Kasper v AAC Holdings et al*, No. 15-cv-00923-JPM-jsf (M.D. Tenn.)
- *Hatamian v. Advanced Micro Devices, Inc.*, No.4:14-cv-00226 (N.D. Cal.).
- *Laborers Pension Trust Fund – Detroit, vs. Conn’s, Inc.*, 4:14-cv-00548 (S.D. Tex.).
- *Leon D. Milbeck v. TrueCar Inc*, No. 2:18-cv-02612 (C.D. Cal.).
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- “Press Release: Miller Energy Provides Details Concerning Recent Events Including Receipt of NYSE Continued Listing Notice,” *Dow Jones Newswires*, April 29, 2015.
- “Press Release: Miller Energy Defers Cash Dividends on Its Series C and Series D Preferred Stock,” *Dow Jones Newswires*, May 6, 2015.

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**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TENNESSEE
KNOXVILLE DIVISION**

LEWIS COSBY, KENNETH R. MARTIN,)	
as beneficiary of the Kenneth Ray Martin)	
Roth IRA, and MARTIN WEAKLEY on)	
behalf of themselves and all others)	
similarly situated,)	
)	
Plaintiffs,)	
)	
v.)	No.: 3:16-CV-121-TAV-DCP
)	
KPMG, LLP,)	
)	
Defendant.)	

EXPERT REBUTTAL REPORT OF CHAD COFFMAN, CFA

June 14, 2019

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I. INTRODUCTION

1. On March 15, 2019 and April 19, 2019¹, I submitted expert reports in this matter in which I opined: (1) that the markets for Miller Energy Securities² were efficient during the Analysis Period³; and (2) that damages in this case could be calculated for both the Section 10(b) Class and the Section 11 Class pursuant to class-wide approaches consistent with Lead Plaintiffs' claims.⁴

2. Despite Defendant's attempt to characterize my methodology as unreliable and containing many errors, the reality is that, out of many thousands of calculations and assessments, I made two errors in my Initial Report that impacted my calculations. Neither was an error in the general methodology I employed to analyze market efficiency.⁵ Instead, one error involved assigning an incorrect market date to a single Miller Energy earnings announcement, and the other was the inadvertent exclusion of two sources cited in the Complaint when assessing which days during the Analysis Period contained news. I readily admitted to the inadvertent errors, corrected them in a new report, and empirically demonstrated that my ultimate

¹ On March 15, 2019, I submitted an expert report in this matter (my "Initial Report"). On April 19, 2019, I submitted a corrected report (the "Coffman Report" or my "Report"), which replaced my Initial Report.

² As in my Report, the term Miller Energy Securities refers to Miller Energy common stock ("Miller Energy Common Stock" or "Common Stock") and Miller Energy's two preferred securities ("Miller Energy Preferred Securities" or "Preferred Securities"): Miller Energy 10.75% Series C Cumulative Redeemable Preferred Stock ("Miller Energy Series C Preferred Stock" or "Series C Preferred Stock"), and Miller Energy 10.5% Series D Fixed Rate/Floating Rate Cumulative Redeemable Preferred Stock ("Miller Energy Series D Preferred Stock" or "Series D Preferred Stock").

³ The stated Class Period in the Second Amended Class Action Complaint is August 29, 2011 – October 1, 2015, however, in my Report, I opined on market efficiency from the beginning of the Class Period through July 30, 2015 (*i.e.* the market date before Miller Energy Securities were delisted from the New York Stock Exchange). This timeframe is the Analysis Period.

⁴ Unless otherwise defined herein, all capitalized terms shall have the meanings given to them in the Report.

⁵ This methodology has led to successful class certification in dozens of securities litigation matters. For example, *Dr. Joseph Kasper v AAC Holdings et al*, No. 15-cv-00923-JPM-jsf (M.D.Tenn.); *Hatamian v. Advanced Micro Devices, Inc.*, No. 4:14-cv-00226 (N.D. Cal.); *Laborers Pension Trust Fund – Detroit, vs. Conn's, Inc.*, 4:14-cv-00548 (S.D. Tex.); and *Leon D. Milbeck v. TrueCar Inc*, No. 2:18-cv-02612 (C.D. Cal.), to name but a few.

conclusions and opinions were unaffected by the errors. My overall methodology was unaltered. While I strive for perfection, that does not always occur.⁶

3. Following the submission of my Report, counsel for Lead Plaintiffs provided me with a copy of the May 13, 2019 Expert Report of Dr. Mukarram Attari, Ph.D. (the “Attari Report”) prepared in connection with Defendant’s Opposition to Plaintiffs’ Motion for Class Certification, and the sworn deposition transcript of Dr. Attari taken on June 4, 2019 (“Attari Deposition”), and asked me to review and respond to the Attari Report and Attari Deposition. In summary, nothing contained in the Attari Report or Attari Deposition changes the opinions I have offered in this matter. The remainder of this Rebuttal Report provides my response to the Attari Report and Attari Deposition.

4. In formulating my opinions set forth in this Rebuttal Report, I relied upon my Report and my knowledge, experience, and formal training in economics, finance, and statistics, as well as the allegations and facts set forth in this lawsuit. In performing the analyses set forth in this Rebuttal Report, I also considered: (1) the Attari Report; (2) data, analyses, and back-up materials provided by Dr. Attari to counsel for Lead Plaintiffs that Dr. Attari claims to have considered in connection with his analyses; (3) the Attari Deposition; and (4) other relevant materials and information. All of the materials that I relied upon and considered in reaching my opinions in this Rebuttal Report are identified in the attached **Appendix A**, as well as in the Appendices to my Report.

5. Global Economics Group is being compensated at an hourly rate of \$800 per hour for my work on this matter, and at rates between \$170 and \$450 per hour for members of my

⁶ The correction of these two errors impacted a number of subsequent calculations in my Report. The changing of these numbers does not reflect independent errors. Based upon my review, I also made certain non-substantive corrections that did not influence any calculations or outcomes in any way.

staff who performed work in connection with this Rebuttal Report under my direction and supervision. My compensation is in no way contingent on the outcome of this case or the opinions offered.

6. I reserve the right to amend this Rebuttal Report, including to reflect new information that becomes available to me in light of the discovery process or future rulings from the Court.

II. DR. ATTARI DOES NOT DISPUTE THAT THE MARKET FOR MILLER ENERGY COMMON STOCK WAS EFFICIENT

A. DR. ATTARI DOES NOT DISPUTE THAT MY ANALYSIS OF THE CAMMER AND KROGMAN FACTORS DEMONSTRATES THAT THE MARKET FOR MILLER ENERGY COMMON STOCK WAS EFFICIENT

7. Dr. Attari provides no evidence or opinions to contradict my opinion of market efficiency for Miller Energy Common Stock. Indeed, he either readily concedes, or does not dispute, my findings for the *Cammer* and *Krogman* factors as they relate to Miller Energy Common Stock:

- a. Dr. Attari affirmatively concurs that the average weekly trading volume for Miller Energy Common Stock surpassed the threshold level necessary for an efficient market (Cammer Factor 1).⁷
- b. Dr. Attari agrees that a number of analysts covered Miller Energy Common Stock throughout the Analysis Period (Cammer Factor 2).⁸

⁷ Attari Deposition 24:4-8.

⁸ Attari Report ¶171 and Attari Deposition 25:5-7. “Mr. Coffman has said there were – whatever – 10 or 15 analysts covering it...And I’m not disputing it in this report, yes.” Attari Deposition 26:2-7.

- c. Dr. Attari does not dispute my conclusion that Miller Energy Common Stock met the market maker factor (Cammer Factor 3).⁹
 - d. Dr. Attari does not dispute that Miller Energy Common Stock traded on the NYSE throughout the Analysis Period¹⁰ and that the NYSE has rules that virtually guarantee a liquid market.¹¹
 - e. Dr. Attari does not dispute that Miller Energy was able to file a Form S-3 throughout the majority of the Analysis Period (Cammer Factor 4).¹²
- Additionally, Dr. Attari incorrectly states that when a company falls below a market capitalization of \$75 million, it is ineligible to file a Form S-3.¹³ In fact, the SEC does allow companies that have previously filed a Form S-3, but have since fallen below \$75 million in market value, to remain Form S-3 eligible provided that they follow certain guidelines.¹⁴ Despite Dr. Attari's flawed criticism, he acknowledges that Miller Energy was S-3 eligible for the majority of the Analysis Period¹⁵ and offers no economic logic for why short-term S-3 ineligibility would impede the market from remaining efficient.

⁹ Attari Deposition 60:19-23. ("Q: In your report, you don't dispute that the number of market makers of Miller Energy's common stock meets the standard under Cammer; correct? A: I don't dispute that, yes.")

¹⁰ Attari Deposition 114:20 – 115:2.

¹¹ Attari Deposition 115:22 – 116:3 ("Q: In the EGC case we were discussing earlier, you claimed that the courts recognize that securities that trade or [are] listed on the New York Stock Exchange are likely to be efficient, didn't you? A. Likely to be, yes.")

¹² Attari Deposition 66:1-8, 12-14.

¹³ Attari Report ¶¶191-192.

¹⁴ <https://www.sec.gov/divisions/corpfin/guidance/safinterp.htm> (accessed June 10, 2019) ("An issuer with less than \$75 million in public float is eligible to use Form S-3 for a primary offering in reliance on Instruction I.B.6, which permits it to sell no more than one-third of its public float within a 12-month period.")

¹⁵ Attari Deposition 66:1-8, 12-14.

f. Dr. Attari does not dispute that there is a cause and effect relationship between new news and changes in the market price for Miller Energy Common Stock (Cammer Factor 5). More specifically, while Dr. Attari makes a general (and incorrect) criticism of the threshold I use to evaluate cause and effect (which I have used in dozens of other certified class actions), Dr. Attari does not dispute the results of my statistical tests demonstrating that:

- Miller Energy Common Stock is statistically significantly more likely (with over 95% confidence) to experience a statistically significant price movement on earnings announcement dates than “no news” dates.¹⁶
- Miller Energy Common Stock experienced statistically significantly (with over 95% confidence) greater volume on earnings announcement dates than “no news” dates. I have shown that the market price of Miller Energy Common Stock is more

¹⁶ See Coffman Report ¶¶74-75. Defendant makes note of the fact that I found that less than 50% of the earnings announcements had a statistically significant price movement, but this is an irrelevant threshold (KPMG LLP’S Memorandum of Law in Support of its Motion to Exclude the Reports and Testimony of Chad Coffman, filed May 21, 2019 No. 3:16-cv-00121-TAV-DCP (E.D. Tenn)). Indeed, there are numerous reasons why many earnings announcements may not be statistically significant that are entirely consistent with market efficiency. For example, as mentioned in my Report and as Dr. Attari testified, the information released may have been largely consistent with expectations, there may have been a mix of positive and negative information, or the market may be focused largely on other factors (Coffman Report ¶¶74-75, Attari Deposition 130:8-132:3). The financial economics literature is clear that there is no theoretical or mathematical reason to believe that the fraction of news days associated with statistically significant returns should exceed fifty percent in an efficient market (See Tabak, David. “What We Should Expect When Testing for Price Response to News in Securities Litigation,” *NERA Economic Consulting*, 2016 pp. 1-17.). Dr. Attari further acknowledges that he does not know of, and has not calculated, an appropriate threshold and admits that should a threshold be calculated, it may even be less than fifty percent (Attari Deposition 123:1-128:12.) The fact that less than fifty percent of earnings announcements were associated with statistically significant price movements for Miller Energy Common Stock does not impact my finding that there was a cause and effect relationship between new news and Miller Energy Common Stock.

likely to experience statistically significant price movements, have price movements that are larger, and experience greater volume on earnings announcement dates than “no news” dates. Beyond these scientific tests, Dr. Attari does not even address other clear and convincing examples from my Report that further demonstrate a clear cause and effect relationship.¹⁷ Put simply, Dr. Attari does not opine there is a lack of cause and effect relationship between new information and the market price of Miller Energy Common Stock, and he does not dispute the results of the statistical tests I conducted.

- g. Dr. Attari does not dispute that 181 institutions reported owning Miller Energy Common Stock during the Analysis Period and that this substantial level of institutional ownership supports a conclusion of market efficiency (Krogman Factor).¹⁸
- h. Dr. Attari mischaracterizes my report when he claims that I do not consider the public float of Miller Energy Common Stock in my analysis of market efficiency (Krogman Factor).¹⁹ **Exhibit 16** of my Report analyzes the shares outstanding, insider and institutional holdings, and public float of Miller Energy Common Stock. Throughout the Analysis Period, insiders held, on average, 21.3% of all shares outstanding of Miller Energy Common Stock, meaning that 78.7% of shares were held by non-

¹⁷ See Coffman Report ¶¶vi -xiii.

¹⁸ Attari Deposition 82:5-12.

¹⁹ Attari Report ¶124.

insiders. This large percentage of shares held by non-insiders supports a finding of market efficiency, and Dr. Attari does not dispute this further.

- i. Dr. Attari does not dispute that the bid-ask spread for Miller Energy Common Stock was reasonably low (Krogman Factor).²⁰ He does not dispute that the average percentage bid-ask spread for Miller Energy Common Stock in each month was between 0.1535% and 1.7477%. He does not dispute that prior to the market prices of Miller Energy Securities substantially falling, the bid-ask spread for Miller Energy Common Stock was below the average bid-ask spread of a random sample of 100 other common stocks trading on the NYSE and NASDAQ in December 2014, as illustrated in my Report. Dr. Attari does not dispute that this factor provides evidence that Miller Energy Common Stock traded in an efficient market throughout the Analysis Period.

8. Finally, while neither a *Cammer* Factor nor a *Krogman* Factor, Dr. Attari does not dispute that there was option trading in Miller Energy Common Stock during the Analysis Period.²¹ Additionally, he does not dispute that the existence of active option trading in Miller Energy Common Stock provides evidence supporting efficiency.

9. In sum, Dr. Attari either concedes or does not dispute the evidence provided in my Report that the *Cammer* and *Krogman* factors set out by the courts are satisfied for Miller Energy Common Stock.

²⁰ Attari Deposition 78:8-17.

²¹ Attari Deposition 96:6-10.

B. MY CALCULATION OF THE MILLER COMMON STOCK ABNORMAL RETURN ON OCTOBER 24, 2011 WAS PROPER

10. Although he does not dispute that the market for Miller Energy Common Stock was efficient, Dr. Attari criticizes the method by which I calculated an abnormal return on a single day for Miller Energy Common Stock.²² My treatment of this day is a matter of valid, statistical judgment. When confronted with missing values for a control index, there are several different options for handling the issue. For the next day in which the value for the control index appears, one could throw out the return for that day (and lose part of the sample) or use the multiple-day return for the control index, but understand it may introduce some level of potential measurement error into the model.²³ In this particular case, my judgment was that including a multiple day return in the Oil Price Index did not introduce substantial measurement error. This judgment is borne out by the fact that my results are robust to either treatment. Furthermore, the missing index data issue is not present at all if the NYMEX WTI Oil Index is used and, as reflected in **Rebuttal Exhibit 1**, the conclusions from my cause and effect analysis are unaltered.²⁴

²² Attari Report §IV.C.4.

²³ In this context “measurement error” is a statistical concept that is distinct from a computational error. All models have some level of measurement error because they are models that rely on underlying statistical assumptions. See Greene, William, *Econometric Analysis*, MacMillan, 1990, p. 293. (“Thus far, it has been assumed (at least implicitly) that the data used to estimate the parameters of our models are true measurements on their theoretical counterparts. In practice, this happens only in the best of circumstances. All sorts of measurement problems creep into the data that must be used in our analyses.”)

²⁴ Dr. Attari correctly notes that the two days with missing abnormal returns were incorrectly treated as no news days with statistically significant abnormal returns. Again, using the NYMEX index eliminates this issue and even if I simply correct the original treatment it strengthens the evidence of a cause and effect relationship.

III. I DEMONSTRATED THAT THE MARKETS FOR MILLER ENERGY SERIES C AND SERIES D PREFERRED SHARES WERE EFFICIENT AND DR. ATTARI'S CRITICISMS ARE EITHER MISPLACED, MISLEADING, OR INCORRECT

A. MILLER PREFERRED SECURITIES WOULD NOT BE EXPECTED TO REACT TO EARNINGS ANNOUNCEMENTS PRIOR TO CONCERNS ABOUT SOLVENCY

11. In my Report, I explained using economic logic why one would not expect to see the market price of Miller Energy Series C and Series D Preferred Stock react to earnings announcements.²⁵ As explained in my Report, as a general matter, one would not expect Miller Energy Preferred Securities to react to changes in earnings that did not cause the market to question the solvency of the firm. Dr. Attari never addresses this logic from my Report and simply suggests, without economic support, that in an efficient market one would expect preferred stock to react to earnings announcements.²⁶ This is demonstrably false and inconsistent with economic theory.

12. As I explained in my Report, for non-convertible debt-like securities (which applies to Series D) or for convertible debt-like securities where the common stock price is below where conversion to common would be profitable (which applies to Series C), investors in preferred shares would (unlike common shareholders) not receive any higher expected cash flows from a positive earnings surprise. This flows directly from the basic valuation principle that all securities are valued based upon the expected future cash flows *to those security-holders*, discounted at the appropriate rate.²⁷ As described in the Coffman Report, Miller Energy

²⁵ Coffman Report ¶51.

²⁶ Attari Report ¶¶134-135, 141.

²⁷ Reilly, Frank K. and Keith C. Brown, Investment Analysis and Portfolio Management, The Dryden Press, Sixth Edition, 2000, p. 82; Brealey, Richard A. and Stewart C. Myers, Principles of Corporate Finance, McGraw-Hill, 1988, Third Edition, pp. 308-309.

Preferred Securities are entitled to the payment of preferred dividends and eventually the redemption value.²⁸ Only common stockholders are entitled to residual earnings over and above what is necessary to service debt and preferred securities. As a result, all else being equal, an additional dollar of earnings at the margin would have no influence on the market value of preferred securities. Likewise, a negative earnings surprise, as long as it was not sufficiently large to call into question the payment of preferred dividends, would not lower the expected cash flows to preferred shareholders.²⁹ Dr. Attari does not, and cannot, refute this most straightforward application of basic valuation concepts to the Miller Energy Preferred Securities.

13. However, this economic logic changes once the market begins to question whether there will be enough resources to continue paying preferred dividends. A clear signal of this market concern occurs when preferred shares start trading substantially below their redemption value, because it reflects the market's belief that the cash available to satisfy preferred dividends and redemption of the preferred shares is more uncertain.³⁰ In those circumstances, the availability of cash flows to pay preferred dividends is more closely tied to the short-term financial prospects of the firm. As such, one would expect greater sensitivity to earnings announcements. This is precisely the logic and rationale for (1) considering different events before and after the preferred securities started trading below their redemption value and (2) why

²⁸ Miller Energy Series C Preferred Stock may have also become sensitive to earnings announcements had the Common Stock approached or exceeded \$10 per share because of the conversion features outlined in its prospectus. However, Miller Energy Common Stock did not reach that value during the Analysis Period. Series D Preferred Stock, meanwhile, was non-convertible and was therefore not sensitive to any conversion feature. For further information on the terms and conditions of Miller Energy Series C and Series D Preferred Stock, please see Appendix C from my Report.

²⁹ Attari Deposition 132:17-21 ("So preferred stockholders get paid after debt holders have been paid but before common stockholders are paid. They typically have a stated dividend.")

³⁰ Emanuel, David. "A Theoretical Model for Valuing Preferred Stock." *The Journal of Finance*, vol. 38, no. 4, 1983. See also "How to Play Preferreds", *MoneyShow*, 2017. ("If [a preferred share is] trading significantly below par, investors may have concerns about the company's creditworthiness.").

I did not consider earnings announcements prior to October 15, 2014 as a meaningful or statistically powerful set of dates to consider.³¹ Therefore, Dr. Attari's analysis of the earnings announcements and whether they did not cause a statistically significant price movement for the preferred shares is neither surprising nor informative as to whether there was a cause and effect relationship for Miller Energy Preferred Securities. Moreover, Dr. Attari admits that "the information relevant to investors in Miller Energy's common stock and the preferred stock was different" and that investors in the Preferred Securities need information besides earnings announcements to evaluate the debt component of the preferred securities.³²

B. DR. ATTARI MISCHARACTERIZES MY REFERENCES TO THE APPLICABLE DISCOUNT RATE AND THE TIME VALUE OF MONEY

14. Dr. Attari also misleadingly asserts that my Report suggested that the market price of Miller Energy Preferred Securities should only be impacted by risk-free interest rates prior to October 15, 2014.³³ My report makes no such suggestion. As quoted by Dr. Attari, I state, "from the time of the issuance of each of the Preferred Securities to the time where the market prices substantially fall below the par value (and therefore indicating an increased risk of default), market price would be driven primarily by changes in the time value of money (*i.e.* **the applicable discount rate**)."³⁴ Basic valuation theory explains that the "applicable discount rate" for a security incorporates both risk free rates and the relevant security-specific risk premium.³⁵ Any suggestion that I was referring only to risk free rates is misleading and incorrect (indeed I

³¹ By statistically powerful, I mean that it would have little ability to distinguish between a market where there was a cause and effect relationship and one that did not.

³² Attari Report ¶173.

³³ Attari Report ¶139.

³⁴ Attari Report ¶136. Emphasis added.

³⁵ Brealey et al. Principles of Corporate Finance, Tenth Edition, McGraw-Hill, 2010, Chapter 3.

never even mention the term “risk-free rate”). As a result, the analysis performed by Dr. Attari to show that returns of Miller Energy Preferred Securities were not correlated with risk free rates proves nothing, and is not at all inconsistent with any statement in my Report.³⁶ I never suggested risk-free rates alone could or would explain the returns of the Preferred Securities.³⁷

C. DR. ATTARI’S CLAIM THAT I ENGAGED IN DATA SNOOPING IS UNSUPPORTED AND FALSE

15. Dr. Attari also falsely asserts without any evidence that I may have engaged in data snooping to determine which events to test.³⁸ My Report clearly identified the objective criteria I used to determine the news dates I tested for Miller Energy Preferred Securities. Moreover, the selection criteria flow naturally from my discussion of how preferred stocks differ from common stocks and what types of news would be expected to impact preferred shares – a fact that Dr. Attari conceded at his deposition.³⁹ Again – my criteria was: “firm-specific events that clearly updated the market regarding the ability of the Company to continue paying dividends or for the securities to continue trading on the exchange.”⁴⁰ Dr. Attari provides no authority or economic rationale to reject considering events related to dividend policy as an objective set of dates to test. Dr. Attari does not dispute that information about delisting would be relevant to a valuation of Miller Energy Preferred Securities. Dr. Attari’s suggestion that the delisting itself did not

³⁶ Attari Report ¶¶138-139.

³⁷ To the extent Dr. Attari is interpreting my use of the phrase “time value of money” to specifically mean a “risk-free rate”, he is simply wrong. The discount rate (which I clearly reference in my Report as a synonym for what I meant by time value of money) is the rate at which an investor in the Preferred Securities is willing to trade money today for money tomorrow within the context of an investment in the Preferred Securities. That is the relevant “time value of money” or “yield” necessary to compensate the investor for use of their capital. See Brigham, Eugene F. and Joel F. Houston. Fundamentals of Financial Management, Eighth Edition, The Dryden Press, 1998, Chapter 6.

³⁸ Attari Report ¶132.

³⁹ Attari Deposition 135:5-18.

⁴⁰ Coffman Report ¶52.

provide unexpected news is simply wrong and inconsistent with the facts.⁴¹ There are many cases in which a notice of potential delisting does not lead to an actual delisting.⁴²

D. DR. ATTARI'S SUGGESTION THAT THERE IS NO SUPPORT FOR THE TESTS I PERFORM IN EXHIBIT 10 AND 12 OF MY REPORT IS SELF-CONTRADICTIONARY, IGNORES THE MOST BASIC PRINCIPLES OF HYPOTHESIS TESTING, AND IS INCONSISTENT WITH CASE LAW

i. DR. ATTARI CONTRADICTS HIMSELF WHEN HE FALSELY CLAIMS THERE IS NO LITERATURE TO SUPPORT MY TESTS

16. Dr. Attari acknowledges that there is literature specific to class action securities cases published by a firm typically associated with defense experts describing the methodology I employed to test for cause and effect and finding that it is both valid and superior to methods that historically were used to establish market efficiency in this context.⁴³ He also acknowledges that the methodology I employed has been evaluated and accepted by numerous courts over many years.⁴⁴ The literature that Dr. Attari cites claims that “what is needed, therefore, is a test that examines the response of the stock price to news.... In the case of testing whether there is a cause and effect relationship between news and movements in a stock price, this means not simply finding a case where there was news and a stock price movement, but finding two

⁴¹ See Section V below.

⁴² Sanger, Gary C. and James D. Paterson, “An Empirical Analysis of Common Stock Delistings,” *The Journal of Financial and Quantitative Analysis*, Vol. 25 (2), 1990 pp. 262-272. (“The period 1962-1985, a total of 363 NYSE and ASE firms fell below their respective aggregate market value requirements. Of these, 225 were delisted.” p. 263 fn.1) For more recent evidence of stocks regaining compliance with the NYSE and NASDAQ following a delisting notification see “ReWalk Robotics Regains Compliance with Nasdaq Listing Rules 5550(a) and 5550(b),” *Globe Newswire*, April 26, 2019; “Camber Energy, Inc. Announces That It Has Regained Compliance with All NYSE American Continued Listing Standards,” *Accesswire*, June 5, 2019; and “Novan Achieves Compliance with Nasdaq Listing Rule 5450(b)(2)(A),” *Globe Newswire* June 6, 2019.

⁴³ Due to its specific and limited applications outside its scope, it is unsurprising that the specific methods used to establish market efficiency in the niche area of class action securities cases has not been the subject of peer reviewed economic literature.

⁴⁴ Attari Deposition 121:5 - 122:6.

samples of defendant's stock prices-one with news and one without-and testing whether the price movements for the two samples are distinguishable."⁴⁵ This is precisely the methodology I utilize in my Report.

17. Dr. Attari's criticism of my methodology also ignores that the test I perform is a standard hypothesis test that is ubiquitous in applications of the scientific method, and is entirely consistent with the literature he cites. For example, my approach is akin to the tests used to evaluate drug products. The news dates represent the "treatment" group and the no news dates represent the "placebo" group. My tests show that there are statistically significant differences in outcomes between the two groups. This is quintessential hypothesis testing that is described in basic statistical textbooks.⁴⁶

18. In addition, Dr. Attari's criticism ignores that the methodology I employed is endorsed in the academic literature that he himself cited. For Dr. Attari to suggest there is "no support" for my methodology is disingenuous and misleading. Further, his suggestion that I am using a "low threshold" is directly contradicted by the fact that I am requiring the news dates to be statistically significantly different than the no news dates at the standard level used for hypothesis testing – namely, that I can reject with 95% confidence that the price movements on the news dates are the same as the price movements on the no-news dates. This test is

⁴⁵ Ferrillo, Paul A., Frederick C. Dunbar, PhD, and David Tabak, PhD, "The 'Less Than' Efficient Capital Markets Hypothesis: Requiring More Proof From Plaintiffs In Fraud-On-The-Market Cases," *St. John's Law Review*, Vol. 28(1), 2004. See also David Tabak, "Use and Misuses of Event Studies to Examine Market Efficiency," *NERA Economic Consulting*, September 11, 2009.

⁴⁶ Tabak, David I. and Frederick C. Dunbar, "Materiality and Magnitude: Event Studies in the Courtroom," in *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, Wiley, 2001; MacKinlay, A. Craig, "Event Studies in Economics and Finance," *Journal of Economics Literature* 35(1) (1997), pp. 13-39 (The null hypothesis is "...that the event has no impact on the behavior of returns (mean or variance)", p. 21); Binder, John, "The Event Study Methodology Since 1969," *Review of Quantitative Finance and Accounting* 11 (1998), pp. 111-137; Aharony, Joseph and Itzhak Swary, "Quarterly Dividend and Earnings Announcements and Stockholders' Returns: An Empirical Analysis," *The Journal of Finance* 35(1) (1980), pp. 1-12.

completely in line with the literature that Dr. Attari cites, which tests for stock price movements at both the 90 percent and 95 percent confidence level. Again, Dr. Attari provides no authority or support to suggest that using the typical threshold for inference testing in scientific inquiry generally, and in the financial economics discipline specifically, is a “low threshold.”

19. Dr. Attari suggests more specifically that my comparison of absolute abnormal returns and trading volume do not take into account that some of the no-news dates are drawn from the period of time when volatility and volume were lower and, therefore, potentially bias my test for those measures.⁴⁷ While he suggests this renders the tests “invalid”, he is wrong.⁴⁸ All statistical tests have potential sources of bias. The question is whether the bias is sufficiently large to render the test unreliable. **Rebuttal Exhibits 2 and 3** show that even if I perform the same comparison over the post-October 15, 2014 period so that all the data are coming from the higher volatility and volume period, the differences between the news and no news days are still significant at well over the 99% confidence level. Thus, while Dr. Attari identifies a minor potential source of statistical bias, I controlled for that bias and it does not alter the outcome of the test or impact the results.

**ii. DR. ATTARI MISCHARACTERIZES THE “MISGIVINGS”
FELT BY THE AUTHORS OF THE LITERATURE HE CITES**

20. Dr. Attari relatedly suggests that the authors of the methodology I employed express “strong misgivings” about that methodology. Dr. Attari is wrong. One of the authors of the methodology, Dr. Tabak, recently published literature supporting the appropriateness of the

⁴⁷ Attari Report ¶¶142-144.

⁴⁸ Attari Report ¶159.

“FDT methodology” I used, and discusses case law where the methodology has been applied and upheld.⁴⁹ In fact, Dr. Tabak acknowledges that the methodology I employ is similar to those conducted in medical studies, in that the price movements on news days (the treatment) group are compared to price movements on no news days (the placebo group). He expresses no misgivings about the validity of this methodology, which has been employed in countless securities cases throughout the years.

21. Further, while Dr. Tabak correctly explains that event studies can be improperly performed to determine market efficiency, my method is not subject to these criticisms. I do not perform a non-rigorous “proof by example”, as some experts have, where the “proof” of market efficiency is a list of dates that happen to contain news and a statistically significant price reaction.

22. Although Dr. Attari accuses me of potentially “data snooping” in my selection of news days, I did no such thing and my method is in line with the literature he cites (“Fortunately, the relevant academic literature is clear: first one identifies news and then measures price movements associated with that news”).⁵⁰ Dr. Attari’s literature suggests performing an FDT test (i.e. the test I perform), “in which news days and non-news days are categorized into those that are associated with statistically significant returns and those with statistically insignificant

⁴⁹ Tabak, David, “What Should We Expect When Testing for Price Response to News in Securities Litigation,” *NERA Economic Consulting*, 2016, pp 1-17 “More recently, courts have accepted a number of tests of market efficiency that directly follow the FDT Test procedures, if not citing the FDT paper directly.”

⁵⁰ Tabak, David I. and Frederick C. Dunbar, “Materiality and Magnitude: Event Studies in the Courtroom,” in *Litigation Services Handbook, The Role of the Financial Expert*, Third Edition, Wiley, 2001.

returns.”⁵¹ Therefore Dr. Attari’s claim that my cause and effect analysis has “no scientific basis” is unsupported by the very literature he cites.

iii. MY METHODOLOGY HAS BEEN REPEATEDLY ACCEPTED BY COURTS THROUGHOUT THE COUNTRY AND IN THE 6TH CIRCUIT

23. Dr. Attari’s criticism of the methodology I employed ignores the substantial and growing volume of case law that supports its’ use.⁵² I, like numerous other experts, have used the same overall approach to evaluate cause and effect in at least 25 prior reports where the class has been certified.⁵³ Indeed, in many of those cases, my approach even goes unchallenged by defendants.

E. DR. ATTARI’S SUGGESTION THAT MY ANALYSIS OF AUTOCORRELATION IS “RIDDLED WITH ERRORS” IS UNSUPPORTED BY THE TEXT OF HIS OWN REPORT

24. Dr. Attari does not identify any “errors” in my autocorrelation analysis (see Attari Report ¶¶ 161-166, which does not identify any “errors”).⁵⁴ Instead, his criticism centers around the fact that (1) I ran only one type of test for autocorrelation; (2) that a lack of autocorrelation alone is not evidence of semi-strong form efficiency; and (3) that my test shows some autocorrelation.

⁵¹ Tabak, David I. and Frederick C. Dunbar, “Materiality and Magnitude: Event Studies in the Courtroom,” in Litigation Services Handbook, The Role of the Financial Expert, Third Edition, Wiley, 2001.

⁵² Tabak, David I, “What Should We Expect When Testing for Price Response to News in Securities Litigation”, NERA Economic Consulting, 2016.

⁵³ For example, *Dr. Joseph Kasper v AAC Holdings et al*, No. 15-cv-00923-JPM-jsf (M.D. Tenn.)

⁵⁴ To the extent he is referring to the purported “errors” referenced in Section IV of his report, I address these below in this Section, as well as Sections F and G.

25. First, while a simple test, the test I perform is a standard method to assess autocorrelation.⁵⁵ In fact, Dr. Attari has testified previously that my method is the “most common” test for autocorrelation.⁵⁶ It is especially relevant to the context of market efficiency, because it is the one factor that tests for whether there is a systematic bias in the movement of returns. For example, if a stock regularly responded only partially to news, it would yield consistent positive autocorrelation under my test. Likewise, if the market consistently over-reacted, that would induce systematic negative autocorrelation. While Dr. Attari speculates that there could be more complex ways in which the stock is autocorrelated, he does not provide any such evidence.⁵⁷ In other words, if yesterday’s stock price movement is not a consistent predictor of today’s price movement, there is no *a priori* reason to believe that there is a relationship with multiple prior days.

26. Second, I never claim in my report that the autocorrelation analysis proves market efficiency. Indeed I was very clear when I stated “... since there are no bright-line tests for efficiency, it is important to consider the identified efficiency factors as a whole because none of the individual tests or metrics is determinative as to whether a particular market is efficient.”⁵⁸ However, autocorrelation is one of the many factors I analyzed and the results are consistent with, and therefore supportive of, market efficiency.

⁵⁵ Gujarati, D., Basic Econometrics, Third Edition, McGraw Hill, 1995, Chapter 12.

⁵⁶ Expert Report of Dr. Mukarram Attari, in Dalton Petrie, et al, v Electronic Game Card, Inc., et al, and Penny Pace, et al, v. Timothy Quintanilla, et al, No. 10-0252 and 14-2067, filed June 1, 2015 (C.D. California). ¶28. (“The most common test for autocorrelation is the one that tests if a return on a given day is predicable by the prior day’s return.”)

⁵⁷ Attari Deposition 92:15-21. (“Q: Can you explain what kind of complex arbitrage opportunity would be able to take place where the auto correlation coefficient reverses regularly like that. A. Sitting here, I haven’t done the work for it.”)

⁵⁸ Coffman Report ¶22.

27. Finally, Dr. Attari suggests that my autocorrelation test suggests that the market for the Miller Energy Preferred Securities was inefficient.⁵⁹ Nothing could be further from the truth. As described in my Report, autocorrelation can appear in security returns due to the timing of news or random chance, but the relevant test is whether there is evidence of systematic autocorrelation that would suggest an arbitrage opportunity. To have an arbitrage opportunity one would expect the autocorrelation to have a consistent sign (*i.e.* it would have to either be positively autocorrelated so one could employ a strategy of buying when the price is up or negatively autocorrelated so that one could employ a strategy of buying when the price is down).⁶⁰ As shown in ***Exhibit 17-C*** and ***Exhibit 17-D*** of my Report, and as Dr. Attari acknowledged⁶¹, the sign of the autocorrelation coefficient flips signs regularly, demonstrating there was no consistent arbitrage opportunity.

F. DR. ATTARI'S SUGGESTION THAT OTHER FACTORS DO NOT SUPPORT A FINDING OF EFFICIENCY FOR SERIES C AND SERIES D IS INCORRECT

28. Dr. Attari acknowledges the high average trading volume of Miller Energy Preferred Securities.⁶² Indeed, the average weekly trading volume for both Miller Energy Preferred Securities exceeded the threshold level of average weekly trading volume necessary for an efficient market as cited by the *Cammer* Court. To reiterate, and as shown by ***Exhibit 3-C*** and ***Exhibit 3-D*** of my Report, the average weekly turnover as a percentage of shares outstanding was 5.16% for Series C Preferred Stock and 7.93% for Series D Preferred Stock. These levels of

⁵⁹ Attari Report ¶166.

⁶⁰ “In a market with no auto correlation [sic], I would expect the sign to change.” Attari Deposition 93:8-10.

⁶¹ Attari Deposition 91:15-92:2.

⁶² Attari Report ¶69, ¶96.

average weekly trading volume easily surpass the one and two percent thresholds cited in *Cammer* and, thus, are indicative of efficient markets.⁶³

29. Dr. Attari does not dispute that (1) analyst coverage cited in my report is relevant to the analysis of preferred stock⁶⁴ or (2) analysts were following the financial reports of the company.⁶⁵ Dr. Attari, however, overlooks that analyst recommendations and price targets for the Common Stock would be critical inputs into the valuation of Miller Energy Preferred Securities. More specifically, the price targets themselves suggest how large analysts believe the common equity cushion will be, their financial projections would be relevant to evaluating the ability to pay preferred dividends, and analysts specifically discussed Miller Energy Preferred Securities and commented upon the likelihood that the Company would continue to pay the preferred dividends, the Company's debt, and the solvency of the Company, all of which had a direct bearing on investors in Miller Energy Preferred Securities.⁶⁶ Dr. Attari's suggestion that this *Cammer* factor is not met because the analysts did not issue a specific price target or recommendation for Miller Energy Preferred Securities has no justifiable economic basis. Indeed, Dr. Attari admits that he has "no academic research supporting [his] position that in order for an analyst report to be relevant to *Cammer* Factor 2, it must have a price target and a

⁶³ *Cammer*, 711 F. Supp. at 1293 (citing Bromberg & Lowenfels).

⁶⁴ Dr. Attari admits that most factors in analyst reports are relevant to holders of Series C and Series D preferred stock. ("Q: So you agree that the analyst reports, revenue projections, earnings projections, profitability and share price targets were relevant to preferred security holders? A. The share price targets have to do with the common. So they would not be relevant to the preferred stockholders directly. The rest of it would have some relevance, yes.") Attari Deposition 31:21-32:5. See also Attari Deposition 141:24-142:1.

⁶⁵ Attari Deposition 27:16-20.

⁶⁶ "TURNING THE CORNER: Kitchen Sink of a Quarter Could Mark a Bottom, New Strategy in Place," MLV & Co. LLC, December 10, 2014., "LOWERING TARGET: Notices Raise Concerns, But Liquidity Appears Stable, Maintain Buy Rating," MLV & Co. LLC, May 1, 2015., and "MILL releases unaudited fourth quarter and fiscal 2015 results," Noble Financial Capital Markets, July 30, 2015. See also Attari Deposition 31:21-32:24.

buy, hold or sell recommendation on it.”⁶⁷ While the analyst reports may not have explicitly addressed every aspect of what preferred stockholders might care about, that does not mean their presence is irrelevant to market efficiency for Miller Energy Preferred Securities.

30. Dr. Attari’s suggestion that the market maker factor is not supported for Miller Energy Preferred Securities is simply incorrect. As described in my Report, the language from *Cammer* is:

For over the counter markets without volume reporting, the number of market makers is probably the best single criterion. Ten market makers for a security would justify a substantial presumption that the market for the security is an efficient one; five market makers would justify a more modest presumption.⁶⁸

31. As stated in my Report, Miller Energy Preferred Securities traded on the NYSE and therefore did not trade in an “over the counter market without volume reporting.” In that circumstance, counting market makers is not even relevant. Notably, Dr. Attari admits that the NYSE operates differently than the over the counter market, and that it does not require market makers to create liquidity.⁶⁹ He additionally acknowledges precedent that a security’s listing on the NYSE makes it likely to trade efficiently.⁷⁰

32. Dr. Attari acknowledges Miller Energy was S-3 eligible from the initial offerings of both Miller Energy Preferred Securities until December 1, 2014.⁷¹ The fact that Miller Energy

⁶⁷ Attari Deposition 175:6-12. (“Q. But you have no academic research supporting your position that in order for an analyst report to be relevant to Cammer Factor 2, it must have a price target and a buy, hold or sell recommendation on it; correct? A. Yes, correct.”)

⁶⁸ *Cammer*, 711 F. Supp. at 1293 (citing Bromberg & Lowenfels).

⁶⁹ Attari Deposition 61:13-22, 62:11-15.

⁷⁰ Attari Deposition 115:22 – 116:3 (“Q: In the EGC case we were discussing earlier, you claimed that the courts recognize that securities that trade or listed on the New York Stock Exchange are likely to be efficient, didn’t you? A. Likely to be, yes.”)

⁷¹ Attari Report ¶192; Attari Deposition 118:23-119:12.

became ineligible to file a Form S-3 after it failed to timely file one of its Forms 10-K toward the end of the Analysis Period is not evidence of inefficiency of the market generally, and there is no reason to believe that moving from eligibility to ineligibility because of a late filing suddenly introduces market inefficiency when other factors point to continued efficiency during that period (like the volume and cause and effect among others).⁷²

33. The purpose of analyzing a company's market capitalization is not to see whether a particular security of a company is well capitalized, but to see whether the company as a whole is well-capitalized. Dr. Attari agrees that if the *Krogman* factor concerns the capitalization of the company (which the language of the *Krogman* court makes clear it does), analyzing the capitalization of Miller Energy Preferred Securities in isolation is incorrect.⁷³ Nonetheless, Dr. Attari claims that the individual low market capitalization of Miller Energy Preferred Securities at the end of the Analysis Period is an indicator of inefficient markets.⁷⁴ However, the low market capitalization witnessed late in the Analysis Period was driven by declines in prices, not the lack of capitalization generally. As such, Dr. Attari provides insufficient evidence that this factor is indicative of market inefficiency.

34. Dr. Attari does not dispute that the bid-ask spreads on the Series C and Series D Preferred Stock were low until the last eight months of the Analysis Period.⁷⁵ However, he asserts that the high bid-ask spreads on the Series C and Series D Preferred Stock over the final

⁷² Dr. Attari is unaware of "any empirical support that a market becomes less efficient when it moves from S-3 eligible to S-3 ineligible." Attari Deposition 73:16-20.

⁷³ Attari Deposition 77:6-13.

⁷⁴ Attari Report ¶182.

⁷⁵ Coffman Report §VII.H, Attari Report §VII.E.7, and Attari Deposition 78:21-79:5.

eight months of the Analysis Period are indicative of inefficient markets.⁷⁶ The increase in the bid-ask spreads of Miller Energy Preferred Securities were driven by declines in price, not because the markets generally became less efficient. As the prices of the Preferred Securities fell to low-levels, the bid-ask spreads as a percentage of the shares' prices increased because price level is an important determinant of bid-ask spread.⁷⁷ For example a bid-ask spread of \$0.05 on a stock trading at \$10 a share is a substantially smaller percentage spread than a \$0.05 spread on a share trading at \$1 a share.⁷⁸

35. As I stated in my Report, “for all quarterly lists starting in the third calendar quarter of 2012 (when Series C Preferred Stock began trading) and ending at the end of the Analysis Period, the Preferred Securities were not labelled as Section 13F Securities, meaning institutions were not required to report their holdings of the Miller Energy Preferred Securities.”^{79,80} Data on the institutional ownership of Miller Energy Preferred Securities, therefore, is limited to only those institutions voluntarily electing to report their holdings of these shares. Reporting institutions that held Miller Energy Series C Preferred Stock included Brick Asset Management Inc, Crow Point Partners, LLC, Quadrant Capital Group, Spirit of America Management Corp, Scholtz & Co LLC, Swiss-Asia Financial Services Pte Ltd and Theme/Value Investments.⁸¹ Reporting institutions that held Miller Energy Series D Preferred Stock included Wells Fargo

⁷⁶ Attari Report ¶194.

⁷⁷ Harris, Lawrence E., “Minimum Price Variations, Discrete Bid-Ask Spreads and Quotation Sizes,” *The Review of Financial Studies*, v.7 (1), Spring 1994, pp. 149-178.

⁷⁸ “I’m aware of the academic literature that says that lower-priced securities have wider bid ask spreads proportionately.” Attari Deposition 79:13-20.

⁷⁹ Coffman Report, footnote 34.

⁸⁰ Dr. Attari also determined that institutional data was unavailable for the preferred securities. (Attari Deposition 83:9-14.)

⁸¹ Data on institutional holdings obtained from Bloomberg using the HDS function.

and Co, Spirit of America Management Corp, Sun Life Financial Inc, and Teachers Insurance & Annuity of America. Dr. Attari concedes that “Institutional ownership is not an explicitly recognized factor like the Cammer Factors or the Krogman Factors.”⁸² Therefore, the limited data available on institutional holdings of Miller Energy Preferred Securities does not suggest market inefficiency. At worst, the limited amount of data on the institutional holdings of the Miller Energy Preferred Securities renders this factor agnostic regarding this efficiency factor.

G. MY METHODOLOGY FOR EVALUATING MARKET EFFICIENCY FOR THE PREFERRED SECURITIES IS RELIABLE AND MY OPINIONS ARE UNIMPACTED BY ANY OF DR. ATTARI’S CRITICISMS

36. Dr. Attari identified three purported “errors” in my calculation of returns of the Preferred Securities that are part of my event study analysis. None of these purported “errors” are related to the general methodology I employed for analyzing market efficiency and none of them impact the ultimate conclusions or opinions that flow from that methodology (nor does Dr. Attari claim they do).

i. THE USE OF DIVIDEND ADJUSTED RETURNS FOR THE PREFERRED SECURITIES

37. Dr. Attari claims that I should have computed returns for the Series C and Series D Preferred Securities in a manner that adjusts for the payment of dividends. As Dr. Attari notes, the label of the return series in my backup material (ret_MILL_PRC_**div_adj** and ret_MILL_PRD_**div_adj**) is consistent with my intent to compute dividend adjusted returns, not that I was unaware that such an adjustment was necessary. Adjusting for dividend payments is

⁸² Attari Report ¶183.

appropriate and was my intention.⁸³ As noted by Dr. Attari, this error affects a small minority of returns (10 out of 706 for Series C and 6 out of 460 for Series D).

38. The incorporation of dividend adjusted returns for Preferred Series C and Preferred Series D does not impact the results or conclusions in any meaningful way (nor does Dr. Attari suggest it does). For the Series C Preferred Stock, as shown by **Rebuttal Exhibit 4**, the incorporation of dividend adjusted returns does not change the proportion of news days with significant returns, changes the average absolute abnormal return for those days by a negligible 0.02% and does not affect the volume at all. Meanwhile, as **Rebuttal Exhibit 5** illustrates, for the Series D Preferred Stock, there is no change whatsoever to the proportion of news days with significant returns, or the volume, and the average absolute abnormal return changes by 0.02%. The statistical tests of whether the news dates have a greater proportion of statistically significant returns and whether the average absolute returns are higher on news days relative to “no news” days remains statistically significant at far greater than the 99% confidence level, affirming my conclusion that the markets for Miller Energy Preferred Securities were efficient.

39. This criticism, thus, has no substantive influence either on my specific conclusion that there is evidence of a cause and effect relationship or my ultimate conclusion that Miller Energy Preferred Securities traded in efficient markets. It further does not suggest in any way that my analysis is unreliable.

⁸³ In the process of handling the data, a member of my staff manually replaced the dividend-adjusted returns within a spreadsheet and failed to realize the manual calculations erroneously and inadvertently eliminated the dividend adjustment. I take responsibility for not catching this inadvertent, and ultimately inconsequential, calculation error.

**ii. THE USE OF THE INTERCONTINENTAL EXCHANGE WTI
LIGHT SWEET CRUDE OIL FUTURES INDEX**

40. Dr. Attari claims that the index I used to control for changes in the price of oil was not the “NYMEX WTI Light Sweet Crude Oil Futures Index” but instead the “ICE WTI Light Sweet Crude Oil Futures Index.”⁸⁴ As indicated by Dr. Attari, there is no substantive difference in the economic meaning or value of these indices.⁸⁵ Both are meant to track the market price of the same underlying commodity – “West Texas Intermediate oil.”⁸⁶ The indices are both constructed by referencing prices for short term futures contracts covering the same commodity.⁸⁷ The NYMEX Oil Futures Index tracks futures prices from the New York Mercantile Exchange, while the ICE Oil Futures Index tracks futures contracts from the Intercontinental Exchange.⁸⁸ As one would expect, since both of these indices are meant to generally track the same underlying commodity, the prices are highly consistent, as shown in the chart below. The correlation coefficient between the indices is over 97%.

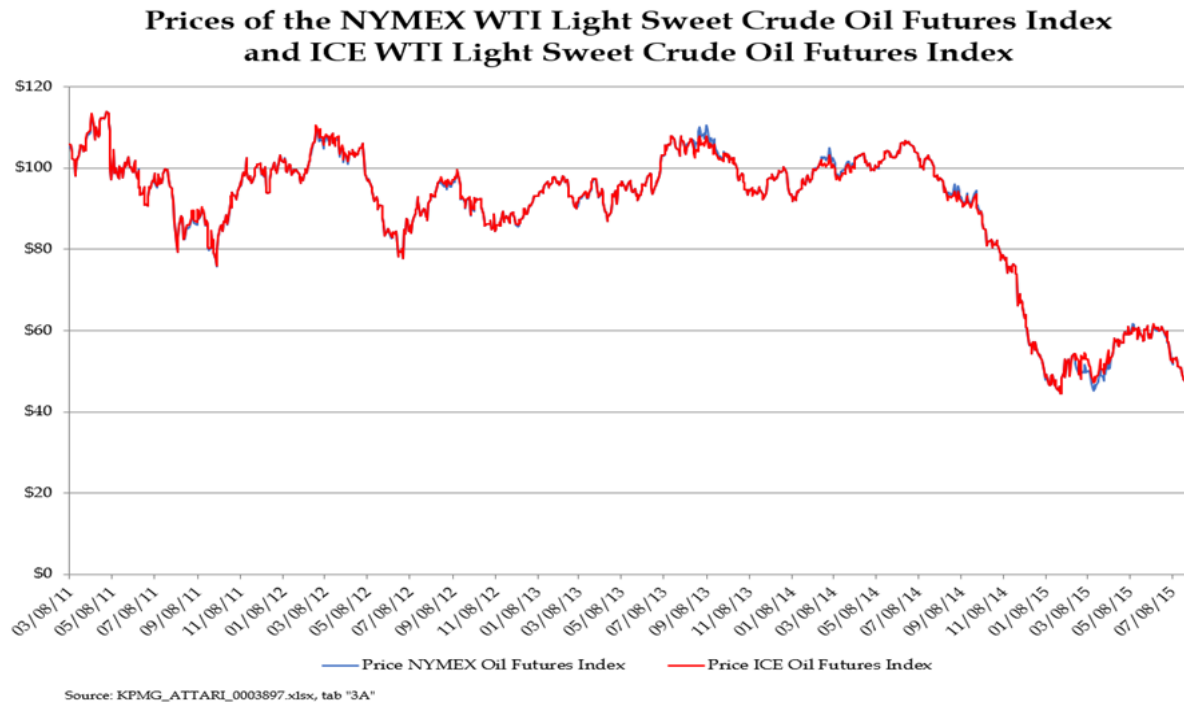
⁸⁴ Attari Report ¶34.

⁸⁵ Attari Report ¶38.

⁸⁶ Dr. Attari agrees on this point. (Attari Deposition 156:17-22.)

⁸⁷ Attari Report ¶¶42-44.

⁸⁸ <https://www.cmegroup.com/trading/why-futures/welcome-to-nymex-wti-light-sweet-crude-oil-futures.html> (accessed May 30, 2019) and <https://www.theice.com/products/213/WTI-Crude-Futures> (accessed May 30, 2019).



41. Given that, it should come as no surprise that using the NYMEX index⁸⁹ has no impact on my conclusions. More specifically, for the news days I analyze, the use of the NYMEX Oil Futures Index does not change the proportion of days that are significant, changes the average absolute return by 0.05% and 0.11% for the Series C Preferred Stock and Series D Preferred Stock respectively, and does not impact the average volume of shares traded. All of the comparisons against the “no news” days remain statistically significant at or above the 95% significance level. See **Rebuttal Exhibit 6**, and **Rebuttal Exhibit 7**, which show the differences for each of the Miller Energy Preferred Securities from the originally filed exhibits.⁹⁰

⁸⁹ I instructed my staff to download the NYMEX WTI Light Sweet Crude Oil Futures Index. A staff member incorrectly downloaded the data for the “ICL” ticker instead of the “CL” ticker, confusing one for the other.

⁹⁰ The use of the NYMEX for Miller Energy Common Stock also has no impact on my conclusions. For the news days I analyze, the use of the NYMEX Oil Futures Index does not change the proportion of days that are significant, changes the average absolute return by 0.03%, and does not impact the average volume of shares traded. See **Rebuttal Exhibit 1** for the differences for Miller Energy Common Stock from the originally filed exhibits.

42. Moreover, setting aside the inconsequential difference in these indices, I demonstrated in my Report that my result was robust to another alternative index of oil companies, specifically, the Dow Jones US Exploration and Production Index.⁹¹ In other words, I never suggested that the NYMEX Index was the one and only possible choice of indices in the first place. Certainly, the ICE Index I used is also a valid control for oil prices, which was the overall intent of the analysis.

43. This criticism, thus, has no substantive influence either on my results or on my ultimate conclusion that Miller Energy Preferred Securities traded in efficient markets. It further does not suggest in any way that my analysis is unreliable.

iii. THE COMPUTATION OF THE “OIL PRICE INDEX” RETURN

44. Dr. Attari argues that it was improper to rely on a third-party constructed price index to control for the price of oil because of the method by which the index was constructed.⁹² He is wrong. Financial economists regularly use third-party price indices to control for market or industry factors without dissecting all of the construction techniques and evaluating if there are better ways to construct the series.⁹³ The index I relied upon is a price index constructed by a

⁹¹ Initial Coffman Report, footnote 52 and Coffman Report, footnote 63.

⁹² Attari Report ¶¶40-45.

⁹³ As a case in point, Dr. Attari himself used a third-party produced control index in a prior report that did not incorporate dividend adjustments (*See*, Expert Report of Dr. Mukarram Attari, in Dalton Petrie, et al, v Electronic Game Card, Inc., et al, and Penny Pace, et al, v. Timothy Quintanilla, et al, No. 10-0252 and 14-2067, filed June 1, 2015 (C.D. California).

In that particular case, he controls for market factors by using the NASDAQ Composite Index, which is not a total return index that adjusts for dividends (*See*, Nasdaq Composite Index Methodology at https://indexes.nasdaqomx.com/docs/methodology_COMP.pdf (“The price return index in USD (Nasdaq: COMP) is ordinarily calculated without regard to cash dividends on Index Securities.”)).

In other words, he relied on a third-party index that commits the same purported error that he accuses me of committing. He did not scrutinize the construction of that index to evaluate if there were hypothetically better ways to construct it.

reputable third party that is intended to track the market price of WTI Oil. I used the price index as provided to control for the price of oil. Dr. Attari's criticism of my approach is, at best, a matter of statistical judgment and does not reflect an error in my methodology.

45. Nevertheless, I demonstrate that even if I had undertaken the procedure suggested by Dr. Attari, my conclusion of a cause and effect relationship between new news and changes in the market price of Miller Energy Preferred Securities is not impacted. (see **Rebuttal Exhibit 9 and Rebuttal Exhibit 10**). More specifically, for the news days I analyze, the use of the procedure suggested by Dr. Attari does not change the proportion of days that are significant and does not impact the average volume of shares traded.⁹⁴ I analyzed both the raw returns I originally used and the dividend adjusted returns using Dr. Attari's proposed methodology for both the Series C and Series D Preferred Stock. **Rebuttal Exhibit 9 and Rebuttal Exhibit 10** show that the use of Dr. Attari's proposed method changes the average absolute return by an inconsequential 0.01% and 0.10%, respectively, when analyzing the dividend adjusted returns for Miller Energy Series C and Series D Preferred Stock.⁹⁵ All of the comparisons against the "no news" days remain statistically significant at or above the 95% significance level for the Miller Energy Preferred Securities. My conclusion that there is scientific evidence of a cause and effect relationship is not sensitive to my use of the WTI Oil index with or without the alterations to the index suggested by Dr. Attari.

46. In summary, the methodology I employed in my Report is reliable, and is consistent with the same methodology I have employed in dozens of other reports in which a class has been

⁹⁴ As illustrated by Rebuttal Exhibit 8, the use of Dr. Attari's procedure changes the average absolute return by an inconsequential 0.02% on the earnings days that I analyzed for Miller Energy Common Stock. This does not change my conclusions about the market efficiency of Miller Energy Common Stock.

⁹⁵ Additionally, Rebuttal Exhibits 9 and 10 illustrate that even when analyzing the raw returns for the Miller Energy Securities, the average absolute abnormal return changes by 0.02% for Miller Energy Series C Preferred Stock and by 0.10% for Miller Energy Series D Preferred Stock.

certified. I have further demonstrated that correcting the purported data errors identified by Dr. Attari does not influence the outcome of any of my analyses. In fact, I have demonstrated that my conclusions are robust to those changes and Dr. Attari's additional criticisms (with which I disagree).

IV. DR. ATTARI INCORRECTLY ASSERTS THAT NEITHER SECTION 10(b) NOR SECTION 11 DAMAGES CAN BE CALCULATED ON A CLASS-WIDE BASIS

A. DR. ATTARI'S CLAIM THAT SECTION 10(b) DAMAGES CANNOT BE CALCULATED ON A CLASS-WIDE BASIS RELIES ENTIRELY ON A MISREPRESENTATION OF PLAINTIFFS' PROPOSED DAMAGES MODEL

47. Plaintiffs are pursuing the standard "out of pocket" measure of damages in this case. Under this methodology, damages are formulaically calculated as the artificial inflation per share at the time of purchase less the artificial inflation at the time of sale (or, if the share is not sold before full revelation of the fraud, the artificial inflation at the time of purchase, subject to the Private Securities Litigation Reform Act of 1995's "90-day lookback" provision, a formulaic limit on damages that also can be applied class-wide).⁹⁶ This methodology is regularly accepted by courts in securities fraud class actions similar to this one. Dr. Attari does not suggest that this methodology is inappropriate. Under this methodology, there is no need to separate investors between the "low risk" and "high risk" investors he identifies.⁹⁷ As is standard, the out of pocket

⁹⁶ Specifically, the Private Securities Litigation Reform Act of 1995 states: "...in any private action arising under this title in which the plaintiff seeks to establish damages by reference to the market price of a security, the award of damages to the plaintiff shall not exceed the difference between the purchase or sale price paid or received, as appropriate, by the plaintiff for the subject security and the mean trading price of that security during the 90-day period beginning on the date on which the information correcting the misstatement or omission that is the basis for the action is disseminated to the market." *See*, Private Securities Litigation Reform Act of 1995, dated December 22, 1995, 737, 748-49.

⁹⁷ Dr. Attari admits that this understanding comes "from discussions with counsel and from a review of an opinion in, I think, the BP case." Dr. Attari admits that if this understanding is incorrect (which it is), then "all investors are treated the same" and his opinions would no longer apply. Attari Deposition 99:5 – 100:16.

methodology assumes investors would have still purchased the relevant security at the time they did. But it assumes the transaction would have occurred at a different price had the full truth been disclosed.

48. While Dr. Attari claims it is inappropriate to take the full decline on all of the corrective disclosures and assume that investors can recover that full amount regardless of when they purchased and what the facts would establish about how much of the artificial inflation was present at the time of purchase,⁹⁸ I never suggested in my Report or deposition that artificial inflation would be quantified in that manner. Instead, Dr. Attari ignores what is stated in my Report and deposition and draws what appears to be a legal inference from the use of a particular phrase in the Complaint that Plaintiffs are seeking something other than the standard out of pocket damages.

49. Defendant suggests that use of the phrase “materialization of the risk” in the Complaint implies that I am supporting a method (or Plaintiffs are requesting a method) that deviates from the “out of pocket” methodology identified in my Report. Defendants cite to my testimony in *Ludlow v BP, L.P.C.*, as purported evidence that my methodology for calculating Section 10(b) damages is unreliable.⁹⁹ However, the nature of the claims in the “pre-spill class” in the Ludlow matter were fundamentally different as a matter of economics than the claims at issue in this case.¹⁰⁰ Further, in the *Ludlow* case, I explicitly acknowledged I was deviating from

⁹⁸ Attari Report ¶207.

⁹⁹ KPMG LLP’S Memorandum of Law in Support of its Motion to Exclude the Reports and Testimony of Chad Coffman, filed May 21, 2019 No. 3:16-cv-00121-TAV-DCP (E.D. Tennessee) §1. B.

¹⁰⁰ The pre-spill subclass sought to recover consequential damages related to the post-spill stock price decline. In so doing, the pre-spill subclass “expressly eschew[ed]” the traditional out-of-pocket damages calculation method advanced by Plaintiffs in typical securities litigation. See Memorandum and Order filed May 20, 2014, in re: BP p.l.c Securities Litigation, MDL No: 10-md-2185, Civil Action No. 4:10-md-2185 (S.D. Texas).

the standard methods for quantifying artificial inflation based on the legal theory being put forward by plaintiffs' counsel there. That case also had a "post-spill class" for which the standard out of pocket method was employed. That subclass was certified.¹⁰¹

50. My articulation of the standard out of pocket damages formula is ubiquitous in class action securities litigation and has been deemed proper and sufficient by numerous courts considering class certification in this context.¹⁰²

B. PROVING TRACEABILITY IS NOT REQUIRED TO DEMONSTRATE DAMAGES FOR THE SECTION 11 CLASS

51. Dr. Attari conflates the issue of whether any particular investor can establish traceability based upon submitting a claim in this matter versus whether damages can be calculated subject to a common methodology. Further, Dr. Attari does not dispute the statutory damages formula articulated in my Report (and reiterated it in his own report) for those that can establish traceability. Indeed, Dr. Attari readily computed statutory damages for Mr. Ziesman assuming he could prove traceability to either of the relevant offerings.¹⁰³ Moreover, his conclusion is predicated on "without knowing which issuance the shares that they purchased came from."¹⁰⁴ Thus, there is no relevant dispute about whether damages can be computed conditional upon an investor demonstrating traceability.

52. I understand traceability is established through the submission of claims. Those investors that can prove they purchased shares directly in the offering can establish traceability.

¹⁰¹ See Memorandum and Order filed May 20, 2014, in re: BP p.l.c Securities Litigation, MDL No: 10-md-2185, Civil Action No. 4:10-md-2185 (S.D. Texas).

¹⁰² Dr. Joseph Kasper v AAC Holdings et al, No. 15-cv-00923-JPM-jsf (M.D. Tennessee); Hatamian v. Advanced Micro Devices, Inc., No. 4:14-cv-00226 (N.D. Cal.); Laborers Pension Trust Fund – Detroit, vs. Conn's, Inc., 4:14-cv-00548 (S.D. Tex.); and Leon D. Milbeck v. TrueCar Inc, No. 2:18-cv-02612 (C.D. Cal.), to name but a few.

¹⁰³ Attari Report ¶85.

¹⁰⁴ Attari Report ¶¶86 and 111.

This could be shown through underwriter records or investor records that are consistent with direct purchases from an underwriter at the offering prices. Whether any after-market purchasers can establish traceability is unknown. To simply conclude they cannot is unnecessarily speculating about what evidence class members might be able to present regarding traceability. As acknowledged by Dr. Attari, his statement that after-market purchasers “cannot” trace their shares to an offering is speculative.¹⁰⁵ It is not at all clear what evidence might exist that could establish traceability, but it is presumptuous to claim it cannot exist. Dr. Attari himself provides one possibility¹⁰⁶, and I see no economic reason (and Dr. Attari certainly does not provide one) to pro-actively exclude all after-market purchasers from the putative class when there are circumstances where such individuals could be class-members.¹⁰⁷

53. Additionally, Dr. Attari incorrectly claims that it is impossible to establish traceability for Series C and Series D Preferred Stock because the issued and outstanding shares of these securities were held in book-entry form at the Depository Trust Company.¹⁰⁸ Dr. Attari correctly notes that the Depository Trust Company was established in 1973 and makes “book-entry” changes to ownership of the securities.¹⁰⁹ Dr. Attari acknowledges that the “overwhelming majority of investors in U.S.-based market do not have shares certificates, but instead hold their shares in book entry form in the DTC.”¹¹⁰ In spite of this, Dr. Attari maintains his claim that no

¹⁰⁵ Attari Report ¶¶80-81, 107.

¹⁰⁶ Attari Report ¶80.

¹⁰⁷ Attari Report ¶79.

¹⁰⁸ Attari Report ¶¶64-67, 95.

¹⁰⁹ DTCC, “The Depository Trust Company (DTC),” <http://www.dtcc.com/about/businesses-and-subsidiaries/dtc>” (accessed on June 7, 2019).

¹¹⁰ Attari Deposition 111:4-9.

after-market purchasers can trace their shares to an offering in virtually all Section 11 cases.¹¹¹

However, Dr. Attari fails to mention that Section 11 cases including aftermarket purchasers have been filed and routinely certified subsequent to the founding of the Depository Trust Company. I do not see a way to reconcile Dr. Attari's position with the presence of these certified cases.

54. Further, assessing damages is separate from assessing traceability. The definition of the Section 11 Class clearly separates traceability from damages.¹¹² My report predicates the calculation of damages upon the establishment of traceability.^{113 114} Whether or not a putative class member that can prove traceability is damaged under the statute is ascertainable with trading records. This is no different than for any investor in a garden variety securities case where putative class members must establish they are in the class and damaged through the claims process.

55. In the typical expert report at the merits phase of litigation, plaintiffs ask the finder of fact to establish the inflation per share in the security. Then, post-verdict, trading records are submitted to establish whether the investor is in the class and the damages are calculated formulaically based upon the out of pocket method using the quantification of the inflation per

¹¹¹ "Q. You state [in the Attari Report], 'after-market purchasers, those who purchase their shares in open-market trading, not directly in one of the public offerings, cannot trace their shares to these offerings'...that is true for virtually any after-market purchaser bringing a Section 11 claim, not just investors in Miller Energy's Series C and Series D; correct? A. That is true for any investor trading in the secondary market." Attari Deposition 112:11 – 113:7.

¹¹² Complaint ¶33. Plaintiffs define the Class as "All those who purchased Miller Energy preferred shares pursuant to or traceable to the Offering Documents (the 'Section 11 Class')."

¹¹³ Coffman Report ¶101. "Section 11 damages can be calculated for the members of the Section 11 Class, all those who purchased Miller Energy Series C Preferred Stock and Miller Energy Series D Preferred Stock 'pursuant to or traceable to the Offering Documents' issued during the Class Period."

¹¹⁴ Dr. Attari himself acknowledges that damages could be computed given basic trade details. "If you had their purchase and sale information, you could compute the damages to that investor for people who purchase in the offering." Attari Deposition 110:1-4.

share during the Class Period. The same is true for the Section 11 Class, with the only difference being that membership in the class also depends on traceability. For those that can establish traceability through the claims process, damages are calculable formulaically under the statute (as indicated by Dr. Attari and consistent with a prior Order in the Gaynor matter).¹¹⁵

V. I PROVIDED STRONG SCIENTIFIC STATISTICAL EVIDENCE THAT THE ALLEGED MISSTATEMENTS IMPACTED THE PRICE OF MILLER ENERGY SECURITIES

56. I understand the Defendant has the burden to establish lack of price impact. To establish lack of price impact, Dr. Attari must show a lack of price impact on both the front end and back end. He does not even try to establish lack of price impact upon corrective disclosures, whereas I show below that there are significant declines on at least some of alleged corrective disclosures. Dr. Attari provides no opinion regarding negative causation¹¹⁶ and did not analyze all of the alleged corrective disclosures.¹¹⁷ Additionally, he acknowledges there was price increase with KPMG's first alleged false statements, but offers no opinion regarding whether those statements contributed to the price increase.

57. Dr. Attari's only opinion is that I do not provide sufficient evidence to prove there was a positive price impact at the time of KPMG's alleged first false statement.¹¹⁸ However, Dr. Attari's opinion is based upon a fundamentally flawed analysis of the events leading up to the August 29, 2011, release of Miller Energy's final audited version of the Form 10-K/A with KPMG's first audit opinion. Indeed, there is strong economic evidence of price impact for this event.

¹¹⁵ Attari Report ¶83. See *Gaynor v. Miller*, No. 15-cv-545, 2018 WL 3751606 (E.D. Tenn. Aug. 6, 2018).

¹¹⁶ Attari Deposition 114:7-10.

¹¹⁷ Attari Deposition 170:3-16.

¹¹⁸ Attari Report § IX.

58. Dr. Attari and I both find that there is a statistically significant price reaction to the release of Miller Energy's final audited version of the Form 10-K/A with KPMG's audit opinion on August 29, 2011, and he does not and cannot definitively rule out that it reflected the impact of the alleged fraud.¹¹⁹ Dr. Attari has suggested that the loan agreement with Guggenheim Corporate Funding may have caused some of the stock price increase on August 29, 2011.¹²⁰ However, an analyst cut his price target for Miller Energy Common Stock as a result of the amended loan agreement, indicating that this news was interpreted negatively by investors.¹²¹ Dr. Attari confirmed this negative interpretation at his deposition and offers no rationale for how or why this information would lead to an increase in price.¹²²

59. Furthermore, Dr. Attari's reference to the results of the internal investigation as a reason for the price increase are (1) directly related to the allegedly false audit report and (2) not even mentioned by analysts as relevant new information. As a result, this information is either irrelevant to price impact or inseparable from the underlying accounting conduct. The release of the KPMG audit report resolved the questions surrounding whether Miller Energy would be able to publish a Form 10-K consistent with its prior accounting with the blessing of an auditor.

60. The market viewed the filing of KPMG's audit report as a critical, positive development.¹²³ The market price of Miller Energy climbed by over 50% on a single day.

¹¹⁹ Attari Report ¶ 217 ("The events leading up to the August 29, 2011 10-K filing make it difficult, if not impossible, to conclude that KPMG's alleged false audit opinion caused inflation in the common stock on that date.")

¹²⁰ Attari Report ¶217. d.

¹²¹ "Miller Energy Resources: Slightly Lower On Higher Payments, Timing of Production Key," *SunTrust Robinson Humphrey*, August 30, 2011.

¹²² Attari Deposition 160:19-161:17, 163:4-164:4.

¹²³ Coffman Report ¶¶vi -xiii.

Indeed, my event study indicates that the market price of Miller Energy Common Stock increased by 57.85%, after controlling for market and industry effects and that this abnormal price increase is statistically significant at the 99% confidence level with a t-statistic of 13.96.¹²⁴ Dr. Attari notes that the market price of Miller Common Stock increased (before controlling for market factors) by 60.8% on August 29, 2011.¹²⁵ It is highly unlikely that this marked price increase would have been possible had Miller Energy been unable to publish a Form 10-K without KPMG's imprimatur.

61. With respect to additional audit opinions issued later in the Class Period, as a matter of economic theory, it is unsurprising that there is no observable stock price increase. Going forward, it would be reasonable for the market to expect KPMG to continue to sign off on Miller Energy's valuation of the Alaska Assets as compliant with GAAP since it had already done so. Therefore, such statements would maintain, rather than increase, any artificial inflation because KPMG's further audit opinions would not have been unexpected.

62. Additionally, Dr. Attari fails to acknowledge that there were statistically significant stock price declines on alleged corrective disclosures. For example, the alleged corrective disclosure on December 24, 2013 saw statistically significant negative abnormal returns for both Miller Energy Preferred Securities. On this day, a report entitled 'Miller Energy: Digging Itself Into Another Deep Hole?' was published by TheStreetSweeper and described that Miller Energy was facing serious debt and financing issues.¹²⁶

63. Following the filing of the Form 8-K with the Securities and Exchange Commission and subsequent press release on July 14, 2014, an investor call held after trading hours on July

¹²⁴ Coffman Report ¶xii.

¹²⁵ Attari Report ¶217. d.

¹²⁶ Complaint ¶200.

15, 2014, likely also contributed to the decline in Miller Energy Common Stock. During that call, CFO John Brawley acknowledged that costs and expenses were high, including DD&A expenses, and acknowledged that poor net income and earnings per share numbers were items that “a number of our shareholders focus on.” Brawley also acknowledged that Miller Energy’s internal controls were still deficient but touted the hiring of “a junior accountant with big four accounting experience” as a reason for investors to be optimistic.¹²⁷

64. Further, on October 13, 2014, after trading hours, Reuters reported that Brean Capital, a firm whose analyst had been following Miller Energy closely, cut its price target of Miller Energy from \$9 to \$7.¹²⁸ This led to a statistically significant decline in the price of Miller Energy Securities. On both of these days, information was publicly released that cast doubt on KPMG’s valuation and audit of Miller Energy assets.

65. Miller Energy Common Stock experienced a statistically significant negative abnormal return on the December 1, 2014 alleged corrective disclosure, and Miller Energy Preferred Series C Stock experienced a negative statistically significant abnormal return on the December 5, 2014 alleged corrective disclosure.¹²⁹ Both of these alleged corrective disclosures stemmed from analysts reducing their price targets for Miller Energy Common Stock.

66. On April 29, 2015, after market hours, Miller Energy filed a Form 8-K, attaching a press release in which it announced that it had received a “Wells Notice” from the SEC indicating that the agency staff had made a preliminary determination to recommend civil action against the Company related to its accounting for its Alaska Assets, in addition to a continued

¹²⁷ “Glacier Oil & Gas Corp. FQ4 2014 Earnings Call Transcripts” S&P Capital IQ. 15 July 2014.

¹²⁸ Complaint ¶214.

¹²⁹ Complaint ¶¶216-217.

listing notice from the NYSE.¹³⁰ All three Miller Energy Securities experienced statistically significant price declines on this day.

67. On May 6, 2015, Miller Energy announced it was deferring dividend payments on its Series C and D Preferred Stock.¹³¹ On this day the Miller Energy Preferred Securities experienced statistically significant price declines.

68. Miller Energy released a Going Concern Warning on July 14, 2015 and subsequently had its securities delisted on July 31, 2015.¹³² Both of these events precipitated statistically significant declines in the Miller Energy Securities.

69. While I understand that any impact from these corrective disclosures could be confounded by other information released on those days, Dr. Attari has not scientifically established that the alleged corrective information did not have any impact on the price of the Miller Energy Securities on these alleged corrective disclosures. Dr. Attari does not even address any of the alleged corrective disclosures or their impact on the Miller Energy Securities in his report.

¹³⁰ “Press Release: Miller Energy Provides Details Concerning Recent Events Including Receipt of NYSE Continued Listing Notice,” *Dow Jones Newswires*, April 29, 2015.

¹³¹ “Press Release: Miller Energy Defers Cash Dividends on Its Series C and Series D Preferred Stock,” *Dow Jones Newswires*, May 6, 2015.

¹³² Complaint ¶¶ 226-227.

70. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.


Chad Coffman

Executed on June 14, 2019

Rebuttal Exhibit 1

Dr. Attari's Criticism That I Used the ICE WTI Oil Futures Index Rather Than The NYMEX WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Common Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism	
Statistic	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings
N	17	316 ⁽¹⁾	17	316 ⁽²⁾
Significant Days at 95% Confidence Level	3	14	3	12
% Significant Days at 95% Confidence Level	17.65% ⁽³⁾	4.43%	17.65% ⁽⁴⁾	3.80%
Average Absolute Abnormal Return	4.16% ⁽⁵⁾	2.52%	4.19% ⁽⁶⁾	2.52%
Average Volume (Millions)	0.71 ⁽⁷⁾	0.3	0.71 ⁽⁸⁾	0.3

Notes:

(1) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 316 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 316 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 17.65% rate of statistical significance is statistically significantly different than 4.43% at the 95% confidence level.

(4) 17.65% rate of statistical significance is statistically significantly different than 3.80% at the 95% confidence level.

(5) 4.16% absolute return is statistically significantly different than 2.52% based on a t-test for difference of means at the 95% confidence level.

(6) 4.19% absolute return is statistically significantly different than 2.52% based on a t-test for difference of means at the 95% confidence level.

(7) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

(8) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 2

Dr. Attari's Criticism That I Compare Material Announcement Dates Against No News Dates Over a Different Time Period Does Not Impact My Finding of Market Efficiency for Miller Energy Series C 10.75% Preferred Stock

Analysis Performed in Coffman Report No News Dates Analyzed From October 8, 2012 to July 31, 2015			Analysis Addressing Dr. Attari's Criticism No News Dates Analyzed From October 15, 2014 to July 31, 2015	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	192 ⁽¹⁾	9	56 ⁽²⁾
Significant Days at 95% Confidence Level	5	9	5	1
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	4.69%	55.56% ⁽⁴⁾	1.79%
Average Absolute Abnormal Return ⁽⁴⁾	27.34% ⁽⁴⁾	1.28%	27.34% ⁽⁴⁾	3.04%
Average Volume (Millions)	0.08 ⁽⁷⁾	0.02	0.08 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the period of 10/15/2014 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 56 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued.

(3) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 1.79% at the 99% confidence level.

(5) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(6) 27.34% absolute return is statistically significantly different than 3.04% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 3

Dr. Attari's Criticism That I Compare Material Announcement Dates Against No News Dates Over a Different Time Period Does Not Impact On My Finding of Market Efficiency for Miller Energy Series D 10.5% Preferred Stock

Analysis Performed In Coffman Report No News Days Analyzed From October 1, 2013 to July 31, 2015			Analysis Addressing Dr. Attari's Criticism No News Days Analyzed From October 15, 2014 to July 31, 2015	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	56 ⁽²⁾
Significant Days at 95% Confidence Level	5	4	5	3
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	3.39%	55.56% ⁽⁴⁾	5.36%
Average Absolute Abnormal Return	22.92% ⁽⁵⁾	2.09%	22.92% ⁽⁶⁾	3.74%
Average Volume (Millions)	0.13 ⁽⁷⁾	0.02	0.13 ⁽⁸⁾	0.03

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the period of 10/15/2014 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 56 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued.

(3) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 5.36% at the 99% confidence level.

(5) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(6) 22.92% absolute return is statistically significantly different than 3.74% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.13 million and 0.03 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 4

Dr. Attari's Criticism That I Used Raw Returns Versus Dividend Adjusted Returns Does Not Impact My Finding of Market Efficiency For Miller Energy Series C 10.75% Preferred Stock

Analysis Performed in the Coffman Report			Analysis Addressing Dr. Attari's Criticism Regarding the use of Dividend Adjusted Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	192 ⁽¹⁾	9	192 ⁽²⁾
Significant Days at 95% Confidence Level	5	9	5	9
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	4.69%	55.56% ⁽⁴⁾	4.69%
Average Absolute Abnormal Return	27.34% ⁽⁵⁾	1.28%	27.36% ⁽⁶⁾	1.29%
Average Volume (Millions)	0.08 ⁽⁷⁾	0.02	0.08 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(5) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(6) 27.36% absolute return is statistically significantly different than 1.29% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 5

Dr. Attari's Criticism That I Used Raw Returns Versus Dividend Adjusted Returns Does Not Impact My Finding of Market Efficiency For Miller Energy Series D 10.5% Preferred Stock

Analysis Performed in the Coffman Report			Analysis Addressing Dr. Attari's Criticism Regarding the use of Dividend Adjusted Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	118 ⁽²⁾
Significant Days at 95% Confidence Level	5	4	5	6
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	3.39%	55.56% ⁽⁴⁾	5.08%
Average Absolute Abnormal Return	22.92% ⁽⁵⁾	2.09%	22.94% ⁽⁶⁾	2.07%
Average Volume (Millions)	0.13 ⁽⁷⁾	0.02	0.13 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 5.08% at the 99% confidence level.

(5) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(6) 22.94% absolute return is statistically significantly different than 2.07% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 6
Dr. Attari's Criticism That I Used the ICE WTI Oil Futures Index Rather Than The NYMEX WTI Oil
Futures Index Does Not Impact My Finding of Market Efficiency for
Miller Energy Series C 10.75% Preferred Stock

Analysis Performed In Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & NYMEX CL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N ⁽¹⁾	9	192 ⁽¹⁾	9	192 ⁽²⁾
Significant Days at 95% Confidence Level	5	9	5	9
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	4.69%	55.56% ⁽⁴⁾	4.69%
Average Absolute Abnormal Return	27.34% ⁽⁵⁾	1.28%	27.29% ⁽⁶⁾	1.27%
Average Volume (Millions)	0.08 ⁽⁷⁾	0.02	0.08 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(5) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(6) 27.29% absolute return is statistically significantly different than 1.27% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 7

Dr. Attari's Criticism That I Used the ICE WTI Oil Futures Index Rather Than The NYMEX CL Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Series D 10.5% Preferred Stock

Analysis Performed In Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & NYMEX CL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	118 ⁽²⁾
Significant Days at 95% Confidence Level	5	4	5	5
% Significant Days at 95% Confidence Level	55.56% ⁽³⁾	3.39%	55.56% ⁽⁴⁾	4.24%
Average Absolute Abnormal Return	22.92% ⁽⁵⁾	2.09%	22.81% ⁽⁶⁾	2.11 %
Average Volume (Millions)	0.13 ⁽⁷⁾	0.02	0.13 ⁽⁸⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.24% at the 99% confidence level.

(5) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(6) 22.81% absolute return is statistically significantly different than 2.11% based on a t-test for difference of means at the 99% confidence level.

(7) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(8) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 8
Dr. Attari's Criticism That I Incorrectly Computed the Returns of The ICE WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Common Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Dr. Attari's Calculations of the ICE WTI Oil Futures Returns	
Statistic	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings	Earnings Announcements	Days with No News, Analyst Reports, or SEC Filings
N	17	316 ⁽¹⁾	17	314 ⁽²⁾
Significant Days at 95% Confidence Level	3	14	3	13
% Significant Days at 95% Confidence Level	17.65% ⁽³⁾	4.43%	17.65% ⁽⁴⁾	4.14%
Average Absolute Abnormal Return	4.16% ⁽⁵⁾	2.52%	4.14% ⁽⁶⁾	2.51%
Average Volume (Millions)	0.71 ⁽⁷⁾	0.3	0.71 ⁽⁸⁾	0.3

Notes:

(1) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 316 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 8/29/2011 through 7/30/2015. For the purposes of this analysis, I selected the 314 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) 17.65% rate of statistical significance is statistically significantly different than 4.43% at the 95% confidence level.

(4) 17.65% rate of statistical significance is statistically significantly different than 4.14% at the 95% confidence level.

(5) 4.14% absolute return is statistically significantly different than 2.52% based on a t-test for difference of means at the 95% confidence level.

(6) 4.16% absolute return is statistically significantly different than 2.51% based on a t-test for difference of means at the 95% confidence level.

(7) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

(8) The difference between 0.7 million and 0.3 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 9

Dr. Attari's Criticism That I Incorrectly Computed the Returns of The ICE WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Series C 10.75% Preferred Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Raw Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns		Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N ⁽¹⁾	9	192 ⁽¹⁾	9	192 ⁽²⁾	9	192 ⁽³⁾
Significant Days at 95% Confidence Level	5	9	5	9	5	9
% Significant Days at 95% Confidence Level	55.56% ⁽⁴⁾	4.69%	55.56% ⁽⁵⁾	4.69%	55.56% ⁽⁶⁾	4.69%
Average Absolute Abnormal Return	27.34% ⁽⁷⁾	1.28%	27.32% ⁽⁸⁾	1.25%	27.33% ⁽⁹⁾	1.26%
Average Volume (Millions)	0.08 ⁽¹⁰⁾	0.02	0.08 ⁽¹¹⁾	0.02	0.08 ⁽¹²⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) Results are based on the Analysis Period of 10/8/2012 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 192 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(4) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(5) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(6) 55.56% rate of statistical significance is statistically significantly different than 4.69% at the 99% confidence level.

(7) 27.34% absolute return is statistically significantly different than 1.28% based on a t-test for difference of means at the 99% confidence level.

(8) 27.32% absolute return is statistically significantly different than 1.25% based on a t-test for difference of means at the 99% confidence level.

(9) 27.33% absolute return is statistically significantly different than 1.26% based on a t-test for difference of means at the 99% confidence level.

(10) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(11) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

(12) The difference between 0.08 million and 0.02 million is statistically significant at the 99% confidence level.

Rebuttal Exhibit 10

Dr. Attari's Criticism That I Incorrectly Computed the Returns of The ICE WTI Oil Futures Index Does Not Impact My Finding of Market Efficiency for Miller Energy Series D 10.5% Preferred Stock

Analysis Performed in Coffman Report			Analysis Addressing Dr. Attari's Criticism Using Raw Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns		Analysis Addressing Dr. Attari's Criticism Using Dividend Adjusted Returns & Dr. Attari's Calculated WTI ICL Futures Index Returns	
Statistic	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings	Material Announcements	Days with No News, Analyst Reports, or SEC Filings
N	9	118 ⁽¹⁾	9	118 ⁽²⁾	9	118 ⁽³⁾
Significant Days at 95% Confidence Level	5	4	5	3	5	5
% Significant Days at 95% Confidence Level	55.56% ⁽⁴⁾	3.39%	55.56% ⁽⁵⁾	2.54%	55.56% ⁽⁶⁾	4.24%
Average Absolute Abnormal Return	22.92% ⁽⁷⁾	2.09%	22.82% ⁽⁸⁾	2.07%	22.82% ⁽⁹⁾	2.05%
Average Volume (Millions)	0.13 ⁽¹⁰⁾	0.02	0.13 ⁽¹¹⁾	0.02	0.13 ⁽¹²⁾	0.02

Notes:

(1) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(2) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(3) Results are based on the Analysis Period of 10/1/2013 through 7/30/2015 (along with results for 7/31/2015 due to the news released after market hours on 7/30/2015). For the purposes of this analysis, I selected the 118 days with no news. Days with no news were days that had zero news articles via the Factiva database, and no analyst reports or SEC filings were issued. Two other dates with corrective information that were not recorded in the initial report (12/24/2013 and 10/14/2014), have been added as news dates.

(4) 55.56% rate of statistical significance is statistically significantly different than 3.39% at the 99% confidence level.

(5) 55.56% rate of statistical significance is statistically significantly different than 2.54% at the 99% confidence level.

(6) 55.56% rate of statistical significance is statistically significantly different than 4.24% at the 99% confidence level.

(7) 22.92% absolute return is statistically significantly different than 2.09% based on a t-test for difference of means at the 99% confidence level.

(8) 22.82% absolute return is statistically significantly different than 2.07% based on a t-test for difference of means at the 99% confidence level.

(9) 22.82% absolute return is statistically significantly different than 2.05% based on a t-test for difference of means at the 99% confidence level.

(10) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(11) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

(12) The difference between 0.13 million and 0.02 million is statistically significant at the 99% confidence level.

Appendix A

Documents Considered

Previous Reports in This Matter

- Expert Report of Chad Coffman, CFA, April 19, 2019, including all data and documents included in Appendix A of that report.
- Expert Report of Dr. Mukarram Attari, PhD, May 13, 2019, including all data, analyses, and back-up materials provided by Dr. Attari to counsel for Lead Plaintiff that Dr. Attari claims to have considered in connection with this report.

Court Documents

- Expert Report of Dr. Mukarram Attari, in Dalton Petrie, et al, v Electronic Game Card, Inc., et al, and Penny Pace, et al, v. Timothy Quintanilla, et al, No. 10-0252 and 14-2067, filed June 1, 2015 (C.D. California).
- *Gaynor v. Miller*, No. 15-cv-545, 2018 WL 3751606 (E.D. Tenn. Aug. 6, 2018)
- KPMG LLP’S Memorandum of Law in Support of its Motion to Exclude the Reports and Testimony of Chad Coffman, filed May 21, 2019 No. 3:16-cv-00121-TAV-DCP (E.D. Tennessee)
- Opposition of KPMG LLP to Plaintiff’s Motion to Certify the Classes, Appoint Class Representatives, and Appoint Class Counsel in *Lewis Cosby et al. vs KPMG LLP*, filed May 21, 2019, No. 3:16-cv-00121-TAV-DCP (E.D. Tennessee).
- Second Amended Class Action Complaint in *Lewis Cosby, et al. vs KPMG LLP*, filed September 15, 2017, No. 3:16-cv-00121 (E.D. Tennessee).

Depositions

- Deposition of Chad Coffman, CFA, April 12, 2019.
- Deposition of Chad Coffman, CFA, April 25, 2019.
- Deposition of Dr. Mukarram Attari, Ph.D. June 6, 2019.

Court Decisions and Securities Law

- Bromberg & Lowenfels, 4 Securities Fraud and Commodities Fraud, § 8.6. (Aug. 1988).
- *Cammer, et al., v. Bruce M. Bloom, et al.*, 711 F. Supp. 1264 (D.N.J. 1989).
- *Dr. Joseph Kasper v AAC Holdings et al*, No. 15-cv-00923-JPM-jsf (M.D. Tenn.)
- *Hatamian v. Advanced Micro Devices, Inc.*, No.4:14-cv-00226 (N.D. Cal.).
- *Laborers Pension Trust Fund – Detroit, vs. Conn’s, Inc.*, 4:14-cv-00548 (S.D. Tex.).
- *Leon D. Milbeck v. TrueCar Inc*, No. 2:18-cv-02612 (C.D. Cal.).
- Private Securities Litigation Reform Act of 1995, dated December 22, 1995, 737, 748-49.
- Memorandum and Order filed May 20, 2014, in re: BP p.l.c Securities Litigation, MDL No: 10-md-2185, Civil Action No. 4:10-md-2185 (S.D. Texas).

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- “Glacier Oil & Gas Corp. FQ4 2014 Earnings Call Transcripts” S&P Capital IQ. 15 July 2014. Web. 3 June 2019.
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- “Novan Achieves Compliance with Nasdaq Listing Rule 5450(b)(2)(A),” *Globe Newswire* June 6, 2019.
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